STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL SURVEY
Horace R. Collins, Chief

Information Circular No. 47

ANALYSES OF OHIO COALS

by

George Botoman
and
David A. Stith

Columbus
1978

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FOREWORD

Detailed chemical data on coal are becoming increasingly important in the face of new environmental controls and utilization concepts. Adequate planning for coal conversion and control mechanisms must be predicated on a complete knowledge of the chemistry of the raw material—coal.

This publication—the first on coal chemistry in seventeen years—reports on the most extensive chemical analytical work ever attempted on a routine basis on Ohio coals and as such marks an important milestone in our knowledge of Ohio's most important mineral resource. During this project, which started in 1975, more than 100 determinations were made on portions of each sample. Even though samples from only 78 locations and eight seams have been processed in this intensive fashion as of the date of this tabulation, the results are considered an important step in assessing Ohio's coal resources.

Additionally, this report includes previously unpublished data on samples from approximately 100 locations; included are data on 11 seams on which proximate and ultimate analyses had been performed in the period from 1960 (date of last chemical analyses tabulation) through 1974. In the interest of completeness, analyses published in Ohio Geological Survey Bulletin 58, "Coal Resources of Ohio" (Brant and DeLong, 1960), are included in this report.

Horace R. Collins

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ANALYSES OF OHIO COALS

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ABSTRACT

Eleven major and minor and 62 trace element analyses as well as proximate and ultimate analyses are listed for 151 coal samples collected in 1975. In addition, this report includes previously unpublished proximate and ultimate analyses on samples from approximately 100 locations and the proximate and ultimate analyses previously published in Ohio Geological Survey Bulletin 58.

INTRODUCTION

Samples (718-745 and 770-815) collected by the Ohio Division of Geological Survey during the summer of 1975 as part of a cooperative program with the U.S. Geological Survey were analyzed in conjunction with a continuing coal geochemistry program. Splits of samples were prepared by U.S. Geological Survey personnel and sent to the U.S. Bureau of Mines for proximate and ultimate analyses; major, minor, and trace element analyses were run in U.S. Geological Survey labs in Denver, Colorado, and in Reston, Virginia.

Proximate and ultimate analyses of 1975 samples were done by standard Bureau of Mines procedures (Office of Coal Research, 1967); analyses of previously unpublished samples by standard ASTM or Bureau of Mines procedures.

ANALYTICAL METHODS

The general flow of the analytical procedure is shown in figure 1. This sequence was followed for most elements for the 1975 samples. Because the coals were ashed at different temperatures for the elemental analysis than were the splits for proximate and ultimate analysis, the ash percentages will not necessarily be the same for the two procedures. X-ray fluorescence methods were used for Si, Al, Ca, K, total Fe, Ti, P, total S, and Cl in the coal ash, with all elements except Cl reported as oxides. This procedure is semiquantitative; only two significant figures are reported for most elements, and no decimal places are reported for Si and Al data.

The remaining major and minor elements (Mg and Na) and several trace elements (Cd, Cu, Li, Pb, and Zn) were determined quantitatively on the ash by atomic absorption spectrophotometry. The last few samples analyzed had Mn done on the ash by AAS (fig. 1).

Most of the trace element analyses on the ash were done by semiquantitative emission spectrographic analysis. Elements so analyzed are Ag, Au, B, Ba, Be, Bi, Dy, Er, Eu, Ga, Gd, Ge, Hf, Ho, In, Ir, Lu, Mn, Mo, Nb, Nd, Ni, Os, Pd, Pr, Pt, Re, Rh, Ru, Sc, Sm, Sn, Sr, Ta, Tb, Te, Tl, Tm, V, W, Y, Yb, and Zr. Some of the first of the samples to be analyzed were run at the Denver lab; for these samples, ash analyses were run for Ce, Co, Cr, and La by the emission spectrographic method. Emission data from the Denver and Reston labs are reported differently. The samples (718-729 and 731-734) from Denver are "identified with geometric brackets whose boundaries are 1.2, 0.83, 0.56, 0.38, 0.26, 0.18, 0.12, and so forth, but are reported as midpoints of these brackets, 1., 0.7, 0.5, 0.3, 0.2, 0.15, 0.1, and so forth; there are thus 6 brackets to the decade. The precision of a reported value is approximately plus-or-minus one bracket at the 68-percent confidence level, or two brackets at the 95-percent confidence level" (Swanson and Huffman, 1976). The emission data from the Reston lab is reported with standard deviation of plus 50 percent and minus 35 percent.

The 14 trace elements run partly or completely on whole coal were done by several different methods: Hg was determined by flameless AAS, F by specific-ion electrode, and Th and U by delayed neutron activation for all samples; neutron activation analysis was used to determine As, Br, Cs, Rb, and Sb for all samples and for Ce, Co, Cr, La, and Se for samples analyzed at Reston; Se was determined for the Denver samples by X-ray fluorescence on whole coal.

ACKNOWLEDGMENTS

Appreciation is expressed to the following for their participation in the 1975 coal-sampling and analysis program: D. L. Streib, who headed the field sampling and the owners and operators whose mines were sampled. Special thanks go to those agencies and individuals who did the analytical work. Included in this group are the coal analysis section, U.S. Bureau of Mines, Pittsburgh, Pa., F. E. Walker, chemist-in-charge. J. H. Medlin and S. L. Coleman, Branch of Coal Resources, U.S. Geological Survey, Reston, Va. Irving May, Chief, Branch of Analytical Laboratories, U.S. Geological Survey, Reston, Va. Analysts, U.S. Geological Survey: C. S. Annell, P. Aruscavage, P. A. Baedecker, J. W. Baker, A. J. Bartel, D. A. Bickford, L. A. Bradley, E. Brandt, F. Brown, J. W. Brown, J. Budinsky, G. T. Burrow, E. Y. Campbell, N. M. Conklin, J. Dinnin, A. F. Dorrzapf, J. Dudinskyi, F. Flanagan, E. J. Fennelly, J. M. Gardner, P. L. Greenland, J. L. Harris, P. Hearn, J. P. Hemming, L. Jenkins, J. O. Johnson, H. Kirschenbaum, R. J. Knight, J. Lindsay, B. McCall, L. Mei, V. M. Merritt, H. T. Millard, R. Moore, J. O'Kelley, N. Rait, J. J. Rowe, H. Schwartz, L. J. Schwarz, G. D. Shipley, F. Simon, J. A. Thomas, R. E. Van Loenen, R. J. Vinnola, A. Vlisidis, J. S. Wahlberg, R. J. White, R. J. Young.

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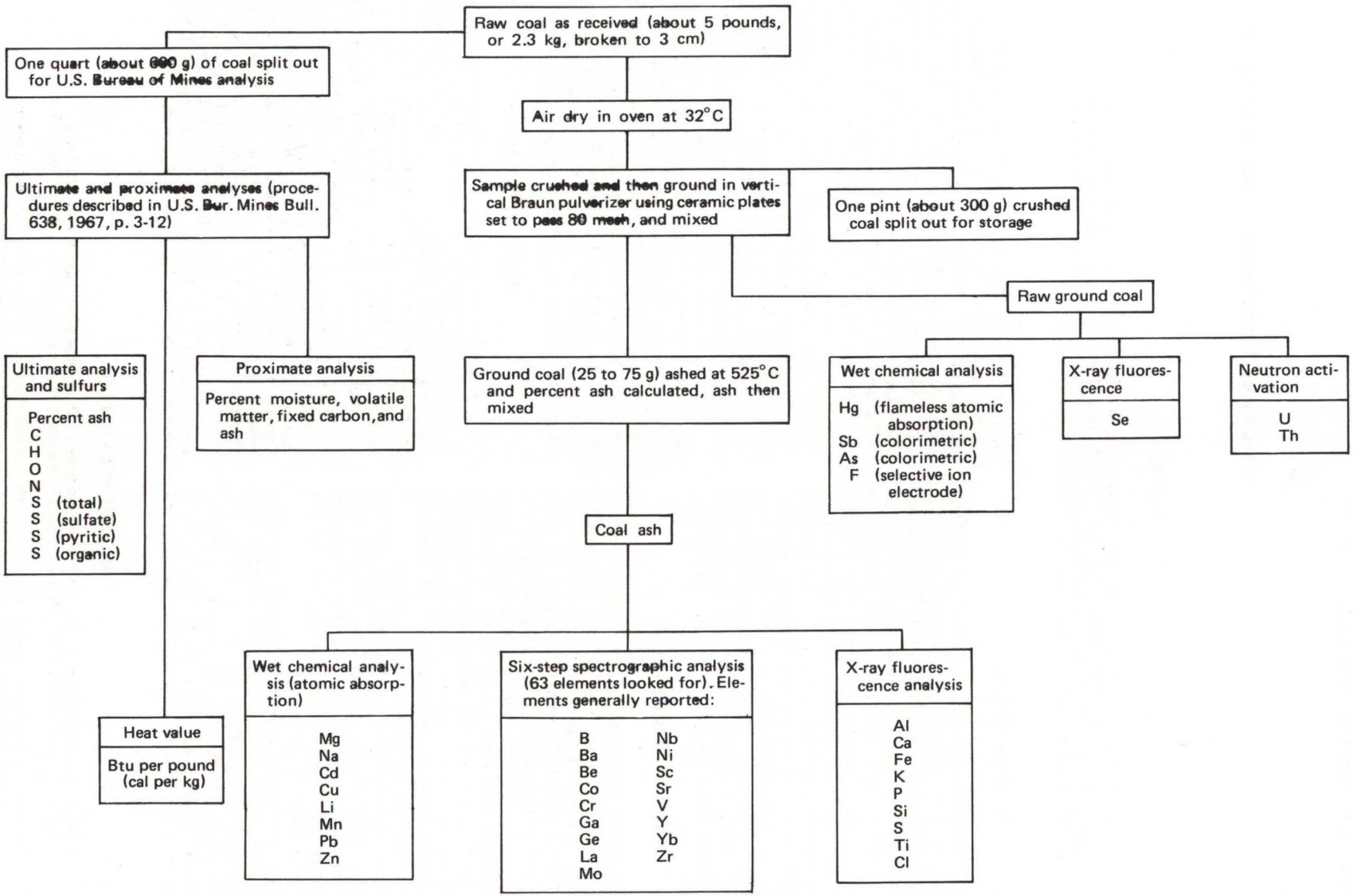

FIGURE 1.–Flow chart showing sequence of sample preparation and chemical analysis (from Swanson and Huffman, 1976).

TABLE 1.–*Proximate-ultimate coal analyses by county*

Key to symbols by column:

OGS file no.:
- X - whole bed sample or single sample excluding shale or partings
- 1-7 - samples taken vertically or in benches
- 9 - composite of bench samples
- 9* - mathematical average of bench samples

Kind:
- 1 - channel (deep mine)
- 2 - channel (strip mine)
- 3 - core
- 4 - run-of-mine: stockpile or tipple

Source:
- 1 - U.S. Bureau of Mines
- 2 - Ohio Geological Survey (no analyses performed in this group, see tables 11, 12)
- 3 - Engineering Experiment Station, Ohio State University
- 4 - miscellaneous

Condition:
- 1 - air-dried
- 2 - as received
- 2* - equilibrated
- 3 - moisture-free
- 4 - moisture- and ash-free

Analyzed thickness:
- F - density float separate of total sample
- * - not complete thickness; core bottomed in coal

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
BELMONT COUNTY																								
Colerain	Waynesburg (No. 11)	788	4	1	2	36	3.7	32.4	42.3	21.6	4.6	58.3	1.1	11.2	3.2	0.30	1.85	1.02	2140	2190	2420	4	10,570	76
		X			3			33.6	43.9	22.5	4.3	60.6	1.2	8.1	3.3	0.31	1.92	1.06					10,970	
					4			43.4	56.6		5.6	78.1	1.5	10.6	4.2	0.40	2.48	1.37					14,150	
		789A	2	1	2	14	2.2	31.6	42.7	23.5	4.6	58.7	0.9	9.9	2.4	0.02	1.35	1.08	2665	2745	2795	4½	10,600	76
		1			3			32.3	43.7	24.0	4.5	60.0	0.9	8.1	2.5	0.02	1.38	1.10					10,840	
					4			42.5	57.5		5.9	78.9	1.2	10.7	3.3	0.03	1.81	1.45					14,260	
		789B	2	1	2	20	1.8	35.9	47.0	15.3	4.8	66.6	1.3	10.1	1.9	0.01	0.92	0.98	2520	2570	2620	5	11,930	76
		2			3			36.6	47.8	15.6	4.7	67.9	1.3	8.6	1.9	0.01	0.94	1.00					12,150	
					4			43.4	56.6		5.6	80.4	1.6	10.1	2.3	0.01	1.11	1.18					14,390	
		789A,B	2	1	2	34	2.0	34.1	45.2	18.7	4.7	63.4	1.1	10.0	2.1	0.01	1.09	1.02	2580	2640	2690		11,380	76
		9*			3			34.8	46.1	19.1	4.6	64.7	1.1	8.4	2.1	0.01	1.11	1.03					11,610	
					4			43.0	57.0		5.6	79.9	1.4	10.4	2.7	0.01	1.39	1.28					14,350	
Goshen		791A	2	1	2	17	1.9	36.6	43.8	17.7	4.8	63.7	1.2	9.6	3.0	0.01	2.06	0.97	2280	2380	2480	4½	11,520	76
		1			3			37.3	44.7	18.0	4.7	64.9	1.2	8.1	3.1	0.01	2.10	0.99					11,750	
					4			45.6	54.4		5.7	79.2	1.5	9.8	3.8	0.01	2.57	1.20					14,330	
		791B	2	1	2	11	4.3	31.8	41.6	22.3	4.5	58.5	1.2	11.8	1.7	0.16	0.66	0.89	2600	2650	2850	4	10,460	76
		2			3			33.2	43.5	23.3	4.2	61.2	1.3	8.2	1.8	0.16	0.69	0.93					10,940	
					4			43.3	56.7		5.5	79.8	1.6	10.8	2.3	0.21	0.90	1.21					14,260	
		791A,B	2	1	2	28	2.9	34.7	42.9	19.5	4.7	61.6	1.2	10.5	2.5	0.07	1.49	0.93	2410	2490	2630		11,090	76
		9*			3			35.7	44.2	20.1	4.5	63.4	1.2	8.2	2.6	0.07	1.53	0.96					11,420	
					4			44.7	55.3		5.6	79.4	1.6	10.2	3.2	0.09	1.90	1.20					14,300	
Kirkwood	Pittsburgh (No. 8)	738A	2	1	2	22	2.8	41.7	42.4	13.1	5.1	67.1	1.2	9.0	4.5	0.18	2.67	1.64	2030	2080	2130	5	12,090	76
		1			3			42.8	43.8	13.4	5.0	69.0	1.3	6.7	4.6	0.18	2.74	1.68					12,440	
					4			49.5	50.5		5.7	79.7	1.4	7.9	5.3	0.21	3.17	1.94					14,370	
		738B	2	1	2	10	3.0	41.3	45.8	9.9	5.3	70.2	1.3	10.3	3.0	0.08	1.60	1.34	2030	2080	2130	7½	12,530	76
		2			3			42.6	47.2	10.2	5.1	72.3	1.3	8.0	3.1	0.08	1.65	1.38					12,910	
					4			47.4	52.6		5.7	80.5	1.5	8.8	3.5	0.09	1.84	1.53					14,380	
		738C	2	1	2	18	2.7	39.7	41.6	16.0	5.0	64.2	1.1	8.8	4.9	0.17	3.91	0.85	2030	2080	2130	6	11,560	76
		3			3			40.8	42.8	16.4	4.8	66.0	1.1	6.6	5.1	0.17	4.02	0.87					11,890	
					4			48.8	51.2		5.8	79.0	1.4	7.7	6.1	0.21	4.81	1.05					14,220	
		738A-C	2	1	2	50	2.8	40.9	42.8	13.5	5.1	66.7	1.2	9.2	4.3	0.15	2.87	1.30	2030	2080	2130		12,000	76
		9*			3			42.1	44.0	13.9	4.9	68.7	1.2	6.9	4.4	0.15	2.95	1.33					12,350	
					4			48.8	51.2		5.7	79.7	1.4	8.0	5.2	0.17	3.45	1.55					14,340	
		786A	2	1	2	10	2.2	46.1	35.8	15.9	4.9	63.8	1.2	6.9	7.3	0.28	5.91	1.14	1980	2030	2090	5	11,760	76
		1			3			47.1	36.7	16.2	4.8	65.2	1.2	5.1	7.5	0.29	6.05	1.16					12,030	
					4			56.3	43.7		5.7	77.9	1.5	6.0	8.9	0.34	7.22	1.39					14,350	
		786B	2	1	2	7	1.9	43.3	35.5	19.3	4.9	61.4	1.2	9.0	4.2	0.16	2.69	1.35	2030	2080	2130	4	11,270	76
		2			3			44.1	36.3	19.6	4.8	62.6	1.2	7.5	4.3	0.16	2.74	1.38					11,490	
					4			54.9	45.1		6.0	77.8	1.5	9.4	5.3	0.20	3.41	1.71					14,290	

		786C	2	1	2	18	2.5	44.3	44.6	8.6	5.5	70.9	1.3	10.1	3.6	0.18	1.68	1.74	2030	2080	2130	6½	12,780	76
		3			3			45.4	45.8	8.8	5.3	72.7	1.3	8.2	3.7	0.18	1.73	1.79					13,100	
					4			49.7	50.3		5.8	79.7	1.4	9.0	4.1	0.20	1.89	1.96					14,360	
		786D	2	1	2	9	3.2	39.0	48.0	9.8	5.1	68.0	1.2	11.4	4.5	0.31	1.72	2.52	2000	2050	2100	5½	12,460	76
		4			3			40.3	49.6	10.1	4.9	70.2	1.2	8.9	4.7	0.32	1.77	2.60					12,860	
					4			44.8	55.2		5.4	78.1	1.3	10.0	5.2	0.35	1.97	2.90					14,310	
		786A-D	2	1	2	44	2.5	43.5	41.8	12.2	5.2	67.1	1.3	9.5	4.7	0.22	2.82	1.70	2010	2060	2110		12,230	76
		9*			3			44.6	42.9	12.5	5.0	68.8	1.3	7.5	4.9	0.23	2.89	1.74					12,540	
					4			51.0	49.0		5.8	78.7	1.4	8.6	5.5	0.25	3.31	1.99					14,340	
		795	2	1	2	50	2.7	41.9	45.5	9.9	5.3	68.4	1.2	10.8	4.4	0.37	1.78	2.25	2050	2080	2110	6	12,580	76
		X			3			43.1	46.7	10.2	5.1	70.3	1.2	8.7	4.5	0.38	1.83	2.31					12,940	
					4			48.0	52.0		5.7	78.3	1.3	9.7	5.0	0.42	2.04	2.57					14,410	
	Meigs Creek (No. 9)	816	3	1	2	42	1.8	38.3	47.8	12.1	5.0	68.9	1.3	9.7	3.0	0.05	1.86	1.05	2080	2130	2230	5½	12,380	77
		X			3			39.0	48.7	12.3	4.9	70.2	1.3	8.3	3.0	0.05	1.89	1.07					12,600	
					4			44.5	55.5		5.6	80.0	1.5	9.5	3.4	0.06	2.16	1.22					14,370	
Richland	Pittsburgh (No. 8)	794	2	1	2	54	1.7	38.2	46.2	13.9	4.9	67.9	1.2	9.5	2.6	0.01	1.20	1.44	2080	2130	2180	6½	12,120	76
		X			3			38.9	46.9	14.2	4.8	69.1	1.2	8.0	2.7	0.01	1.22	1.46					12,330	
					4			45.3	54.7		5.6	80.5	1.4	9.4	3.1	0.01	1.42	1.70					14,360	
		799A	1	1	2	14	2.0	41.3	49.5	7.2	5.4	72.4	1.1	10.0	3.9	0.16	2.23	1.52	1985	2060	2090	5	13,230	76
		1			3			42.2	50.5	7.3	5.3	73.9	1.1	8.4	4.0	0.16	2.27	1.55					13,500	
					4			45.5	54.5		5.7	79.7	1.2	9.1	4.3	0.18	2.45	1.67					14,570	
		799B	1	1	2	21	2.8	37.5	46.5	13.2	5.2	66.2	1.0	9.9	4.5	0.44	2.65	1.45	1895	1985	2095	6	12,090	76
		2			3			38.6	47.8	13.6	5.0	68.2	1.1	7.4	4.7	0.45	2.73	1.50					12,440	
					4			44.7	55.3		5.8	78.8	1.2	8.8	5.4	0.52	3.15	1.73					14,390	
		799C	1	1	2	10	2.0	39.8	49.6	8.6	5.4	70.8	1.1	8.7	5.4	0.32	2.46	2.50	1970	2040	2060	6	12,910	76
		3			3			40.6	50.6	8.8	5.3	72.2	1.2	7.0	5.5	0.33	2.51	2.63					13,170	
					4			44.5	55.5		5.8	79.2	1.3	7.7	5.9	0.36	2.75	2.80					14,440	
		799D	1	1	2	20	2.1	34.4	47.7	15.8	4.7	63.8	1.0	8.5	6.2	0.45	4.28	1.44	1900	1960	2010	6½	11,670	76
		4			3			35.1	48.8	16.1	4.5	65.2	1.1	6.8	6.3	0.46	4.37	1.47					11,910	
					4			41.9	58.1		5.4	77.7	1.3	8.1	7.5	0.55	5.22	1.75					14,200	
		799A-D	1	1	2	65	2.3	37.7	48.0	12.0	5.1	67.5	1.1	9.3	5.0	0.36	3.03	1.62	1930	2000	2060		12,330	76
		9*			3			38.6	49.1	12.3	5.0	69.1	1.1	7.4	5.1	0.36	3.10	1.67					12,620	
					4			44.0	56.0		5.6	78.8	1.3	8.5	5.8	0.42	3.53	1.89					14,380	
		800	1	1	2	63	1.9	38.2	49.9	10.0	5.2	70.3	1.2	8.0	5.3	0.32	3.05	1.98	1940	2000	2025	7	12,720	76
		X			3			38.9	50.9	10.2	5.1	71.6	1.2	6.5	5.4	0.33	3.10	2.02					12,970	
					4			43.3	56.7		5.7	79.7	1.3	7.2	6.1	0.36	3.45	2.24					14,430	
	Waynesburg (No. 11)	778A	2	1	2	18	3.9	32.9	47.0	16.2	4.9	64.5	1.3	11.0	2.1	0.09	1.13	0.91	2300	2350	2450	5½	11,460	76
		1			3			34.3	48.8	16.9	4.6	67.1	1.4	7.8	2.2	0.09	1.18	0.94					11,930	
					4			41.2	58.8		5.5	80.8	1.6	9.4	2.7	0.11	1.42	1.14					14,350	
		778B	2	1	2	8	3.5	35.1	48.5	12.9	5.0	66.4	1.3	12.3	2.1	0.20	0.93	0.98	2520	2570	2620	5	11,940	76
		2			3			36.4	50.2	13.4	4.7	68.8	1.4	9.5	2.2	0.21	0.97	1.02					12,370	
					4			42.1	57.9		5.5	79.4	1.6	11.0	2.5	0.24	1.12	1.18					14,280	
		778C	2	1	2	10	3.1	35.6	46.1	15.2	5.0	66.1	1.3	10.0	2.4	0.10	1.26	1.07	2360	2410	2460	6	11,770	76
		3			3			36.8	47.6	15.6	4.8	68.2	1.4	7.5	2.5	0.10	1.30	1.11					12,140	
					4			43.6	56.4		5.6	80.8	1.6	9.0	3.0	0.12	1.55	1.31					14,390	
		778D	2	1	2	5	2.2	29.5	40.8	27.5	4.0	55.7	0.9	9.0	2.9	0.25	0.39	2.29	2320	2420	2530	1	9,820	76
		4			3			30.1	41.8	28.1	3.9	56.9	1.0	7.1	3.0	0.26	0.40	2.34					10,040	
					4			41.9	58.1		5.4	79.2	1.3	9.9	4.2	0.35	0.55	3.25					13,960	
		778E(A-C)	2	1	2	36	2.1	35.8	48.0	14.1	4.8	66.7	1.3	11.1	2.0	0.01	1.13	0.87	2530	2580	2630	5	12,030	76
		9			3			36.6	49.0	14.4	4.7	68.2	1.3	9.4	2.0	0.01	1.15	0.89					12,290	
					4			42.7	57.3		5.5	79.7	1.6	10.8	2.4	0.01	1.34	1.03					14,350	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
BELMONT COUNTY (continued)																								
Richland (continued)	Waynesburg (No. 11) (continued)	778A-C	2	1	2	36	3.6	34.2	47.1	15.1	5.0	65.4	1.3	11.0	2.2	0.11	1.12	0.97	2410	2420	2490		11,660	76
		9*			3			35.5	48.8	15.7	4.8	67.8	1.3	8.1	2.3	0.12	1.16	1.00					12,090	
					4			42.1	57.8		5.6	80.5	1.6	9.6	2.7	0.14	1.38	1.19					14,340	
		778A-D	2	1	2	41	3.4	33.6	46.4	16.6	4.8	64.2	1.3	10.8	2.3	0.13	1.03	1.12	2400	2420	2500		11,440	76
		9*			3			34.8	48.0	17.2	4.6	66.5	1.3	8.0	2.4	0.13	1.07	1.16					11,850	
					4			42.0	58.0		5.5	80.3	1.6	9.7	2.9	0.16	1.28	1.44					14,300	
		779A	2	1	2	4	2.9	33.9	41.5	21.7	4.5	59.8	1.1	10.6	2.3	0.18	1.39	0.74	2380	2430	2730	3	10,770	76
		1			3			34.9	42.7	22.4	4.3	61.6	1.2	8.1	2.4	0.18	1.44	0.76					11,090	
					4			45.0	55.0		5.6	79.3	1.5	10.5	3.1	0.24	1.85	0.98					14,280	
		779B	2	1	2	17	3.6	32.8	48.8	14.8	5.2	65.8	1.0	11.3	1.9	0.12	0.93	0.83	2560	2670	2720	6½	11,700	76
		2			3			34.1	50.5	15.4	5.0	68.3	1.0	8.3	2.0	0.12	0.97	0.87					12,130	
					4			40.3	59.7		5.9	80.7	1.2	9.9	2.3	0.15	1.14	1.02					14,340	
		779C	2	1	2	12	4.8	33.1	46.4	15.7	4.8	64.7	1.2	11.0	2.6	0.18	1.27	1.12	2030	2080	2180	6	11,410	76
		3			3			34.8	48.8	16.4	4.5	68.0	1.3	7.1	2.7	0.19	1.33	1.17					11,990	
					4			41.7	58.3		5.4	81.4	1.6	8.4	3.2	0.22	1.59	1.41					14,350	
		779D(B,C)	2	1	2	29	2.8	31.7	47.3	18.2	4.9	62.1	1.1	10.9	2.8	0.25	1.53	0.99	2090	2200	2320	4	11,230	76
		9			3			32.6	48.7	18.7	4.7	63.9	1.2	8.7	2.8	0.26	1.58	1.01					11,550	
					4			40.1	59.9		5.8	78.6	1.5	10.6	3.5	0.32	1.94	1.25					14,210	
		779B,C	2	1	2	29	4.1	32.9	47.8	15.2	5.0	65.3	1.1	11.2	2.2	0.14	1.07	0.95	2340	2430	2500		11,580	76
		9*			3			34.3	49.9	15.8	4.7	68.1	1.2	7.9	2.3	0.14	1.12	1.00					12,070	
					4			40.8	59.2		5.6	80.9	1.4	9.4	2.7	0.17	1.32	1.18					14,350	
		779A-C	2	1	2	33	4.0	33.1	47.0	15.9	5.0	64.7	1.1	11.1	2.2	0.14	1.10	0.92	2350	2430	2520		11,480	76
		9*			3			34.5	48.9	16.6	4.7	67.4	1.1	7.9	2.3	0.15	1.15	0.98					11,950	
					4			41.3	58.7		5.7	80.8	1.4	9.4	2.7	0.18	1.38	1.15					14,330	
		793A	2	1	2	14	1.8	34.2	44.0	20.0	4.6	62.4	1.2	9.4	2.4	0.01	1.70	0.72	2520	2570	2620	2½	11,200	76
		1			3			34.8	44.9	20.3	4.4	63.5	1.2	8.1	2.5	0.01	1.73	0.73					11,410	
					4			43.7	56.3		5.6	79.8	1.5	10.0	3.1	0.01	2.17	0.92					14,320	
		793B	2	1	2	24	3.4	32.4	47.8	16.4	4.9	63.7	0.9	11.8	2.3	0.20	1.20	0.89	2650	2730	2800+	3½	11,390	76
		2			3			33.5	49.5	17.0	4.7	66.0	0.9	9.0	2.4	0.21	1.25	0.92					11,790	
					4			40.4	59.6		5.6	79.5	1.1	10.9	2.9	0.25	1.50	1.10					14,200	
		793C	2	1	2	8	2.2	32.6	47.1	18.1	4.6	64.2	1.2	10.1	1.8	0.01	0.97	0.86	2530	2580	2630	5	11,450	76
		3			3			33.3	48.2	18.5	4.4	65.6	1.3	8.3	1.9	0.01	0.99	0.88					11,710	
					4			40.9	59.1		5.4	80.5	1.6	10.2	2.3	0.01	1.21	1.08					14,370	
		793A-C	2	1	2	46	2.7	33.0	46.5	17.8	4.8	63.4	1.0	10.8	2.2	0.10	1.30	0.82	2590	2650	2710		11,340	76
		9*			3			33.9	47.8	18.3	4.6	65.2	1.0	8.6	2.3	0.11	1.34	0.85					11,650	
					4			41.5	58.5		5.7	79.7	1.2	10.6	2.8	0.13	1.64	1.04					14,260	
Smith	Pittsburgh (No. 8)	730	1	1	2	67	2.6	40.7	46.6	10.1	5.2	70.3	1.1	8.6	4.7	0.13	2.56	2.00	1980	2030	2080	6½	12,740	76
		X			3			41.8	47.8	10.4	5.0	72.2	1.1	6.5	4.8	0.13	2.63	2.05					13,080	
					4			46.7	53.3		5.6	80.6	1.3	7.1	5.4	0.15	2.94	2.29					14,600	

		730A	1	1	2	69	1.8	37.7	48.1	12.4	5.1	68.6	1.1	7.2	5.6	0.09	3.21	2.28	2000	2050	2100	5½	12,550	76
		X			3			38.4	48.9	12.7	5.0	69.8	1.1	5.7	5.7	0.09	3.26	2.32					12,780	
					4			44.0	56.0		5.7	79.9	1.3	6.6	6.5	0.10	3.74	2.65					14,630	
Union	Meigs Creek (No. 9)	798	1	1	2	54	2.8	38.7	49.4	9.1	5.2	70.0	1.2	11.5	3.0	0.19	0.85	1.96	2190	2280	2380	6	12,710	76
		X			3			39.8	50.8	9.4	5.1	72.0	1.3	9.1	3.1	0.19	0.88	2.02					13,070	
					4			43.9	56.1		5.6	79.5	1.4	10.1	3.4	0.21	0.97	2.23					14,420	
	Waynesburg (No. 11)	619	3	3	1	37	2.2	35.6	45.6	16.6					3.1								11,810	57
		X			2		4.2	34.9	44.7	16.2					3.0								11,570	
					3			36.4	46.6	17.0					3.2								12,080	
					4			43.8	56.2						3.8								14,540	
Warren	Pittsburgh (No.8)	640	2	1	2	45	3.4	38.8	48.8	9.0														54
		X			3			40.2	50.5	9.3														
					4			44.3	55.7															
		642	1	1	2	43	2.5	41.2	45.9	10.4	5.2	70.6	1.2	8.0	4.6				1980	2030	2070		12,950	54
		X			3			42.3	47.0	10.7	5.1	72.5	1.3	5.7	4.7								13,280	
					4			47.3	52.7		5.7	81.1	1.4	6.5	5.3								14,870	
	Meigs Creek (No. 9)	641	2	1	2	37	2.8	37.2	48.0	12.0	5.1	69.2	1.2	9.7	2.8				2460	2560	2680		12,540	54
		X			3			38.2	49.5	12.3	4.9	71.2	1.3	7.4	2.9								12,900	
					4			43.6	56.4		5.6	81.2	1.4	8.5	3.3								14,710	
Washington	Pittsburgh (No. 8)	722	1	1	1	62	2.0	41.2	47.1	9.7	5.1	71.5	1.2	8.2	4.3				1980	2030	2120	6½	12,920	76
		X			2		2.2	41.1	47.1	9.6	5.1	71.4	1.2	8.4	4.3	0.15	2.54	1.59					12,900	
					3			42.0	48.2	9.8	5.0	73.0	1.2	6.6	4.4	0.15	2.59	1.62					13,190	
					4			46.6	53.4		5.5	81.0	1.4	7.3	4.8	0.17	2.88	1.80					14,630	
		723	1	1	1	60	1.9	41.3	44.5	12.3	5.0	69.2	1.2	7.5	4.8				2000	2050	2100	5	12,560	76
		X			2		2.3	41.2	44.2	12.3	5.0	68.9	1.2	7.8	4.8	0.10	2.92	1.73					12,510	
					3			42.1	45.4	12.5	4.8	70.5	1.2	6.1	4.9	0.10	2.99	1.77					12,790	
					4			48.2	51.8		5.5	80.6	1.4	6.9	5.6	0.12	3.41	2.03					14,630	
		728	1	1	1	64	1.7	41.6	46.6	10.1	5.3	71.2	1.2	7.6	4.6				1990	2040	2090	6	12,930	76
		X			2		2.3	41.4	46.2	10.1	5.3	70.8	1.2	8.0	4.6	0.09	3.19	1.27					12,860	
					3			42.4	47.3	10.3	5.2	72.5	1.3	6.0	4.7	0.09	3.27	1.30					13,160	
					4			47.2	52.8		5.8	80.8	1.4	6.8	5.2	0.10	3.64	1.45					14,670	
		729	1	1	1	60	1.9	41.5	46.0	10.6	5.1	70.2	1.2	7.8	5.1				1980	2030	2080	5	12,770	76
		X			2		2.3	41.3	45.8	10.6	5.1	69.9	1.2	8.1	5.1	0.14	3.68	1.27					12,720	
					3			42.3	46.9	10.8	5.0	71.5	1.3	6.2	5.2	0.14	3.77	1.30					13,020	
					4			47.4	52.6		5.6	80.2	1.4	7.0	5.8	0.16	4.23	1.46					14,590	
Wheeling		814	1	1	2	53	3.3	39.1	44.2	13.4	4.8	66.8	1.3	10.1	3.6	0.27	1.61	1.69	1980	2080	2180	5½	11,930	76
		X			3			40.4	45.8	13.8	4.6	69.1	1.3	7.5	3.7	0.28	1.67	1.75					12,340	
					4			46.9	53.1		5.3	80.1	1.5	8.8	4.3	0.32	1.94	2.03					14,320	
		815	1	1	2	55	3.5	38.8	47.8	9.9	5.2	69.3	1.3	10.2	4.1	0.31	1.91	1.85	2030	2080	2130	4	12,470	76
		X			3			40.1	49.6	10.3	5.0	71.7	1.4	7.4	4.2	0.32	1.98	1.92					12,910	
					4			44.7	55.3		5.5	79.9	1.5	8.4	4.7	0.35	2.20	2.14					14,390	
York		643	1	1	2	58	2.8	42.1	46.6	8.5	5.3	71.2	1.2	9.0	4.8				1920	2020	2300		13,010	54
		X			3			43.3	48.0	8.7	5.1	73.2	1.2	6.9	4.9								13,380	
					4			47.5	52.5		5.6	80.2	1.4	7.4	5.4								14,660	
		724	1	1	1	76	1.7	44.5	42.5	11.3	5.2	69.9	1.2	7.4	5.0				1970	2020	2070	4½	12,710	76
		X			2		1.8	44.5	42.5	11.2	5.2	69.8	1.2	7.7	4.9	0.15	2.77	2.03					12,700	
					3			45.3	43.2	11.5	5.0	71.1	1.2	6.2	5.0	0.15	2.82	2.06					12,930	
					4			51.1	48.9		5.7	80.3	1.4	6.9	5.7	0.17	3.18	2.33					14,600	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
BELMONT COUNTY (continued)																								
York (continued)	Pittsburgh (No. 8) (continued)	725	1	1	1	71	1.7	42.6	45.3	10.4	5.2	70.0	1.2	8.1	5.1				2000	2050	2100	6	12,820	76
		X			2		2.1	42.4	45.1	10.4	5.2	69.8	1.2	8.3	5.1	0.14	3.22	1.74					12,780	
					3			43.3	46.1	10.6	5.1	71.3	1.2	6.6	5.2	0.14	3.29	1.78					13,050	
					4			48.5	51.5		5.7	79.7	1.4	7.4	5.8	0.16	3.68	1.99					14,600	
CARROLL COUNTY																								
Brown	Lower Kittanning (No. 5)	618A	2	3	2	39	2.0	39.8	47.7	10.5	5.0	69.0	1.3	7.8	6.4	0.14	4.71	1.52					12,610	57
		X			3			40.6	48.7	10.7	4.9	70.4	1.3	6.2	6.5	0.14	4.80	1.55					12,870	
					4			45.5	54.5		5.5	78.9	1.5	6.8	7.3	0.16	5.38	1.73					14,414	
		618B	4	3	2	48	2.1	40.8	46.3	10.8	5.1	68.3	1.3	9.5	5.0	0.46	2.64	1.90					12,480	57
		X			3			41.7	47.3	11.0	5.0	69.8	1.3	7.8	5.1	0.46	2.69	1.94					12,750	
					4			46.9	53.1		5.6	78.4	1.5	8.8	5.7	0.52	3.03	2.18					14,330	
COSHOCTON COUNTY																								
Bethlehem	Lower Kittanning (No. 5)	620A	2	3	2*	21	5.1	42.6	43.7	8.6					5.9								12,540	57
		X			3			44.9	46.0	9.1					6.3								13,210	
					4			49.4	50.6						6.9								14,530	
		620B	2	3	2*	23	5.1	43.8	43.4	7.7					5.2								12,730	57
		X			3			46.2	45.7	8.1					5.4								13,400	
					4			50.3	49.7						5.9								14,580	
		620C	2	3	2*	25	5.3	42.6	43.4	8.7					6.4								12,500	57
		X			3			45.0	45.8	9.2					6.7								13,200	
					4			49.5	50.5						7.4								14,530	
		620D	2	3	2	21	2.2	43.0	42.9	11.9	5.1	65.5	1.1	8.2	8.2	0.09	6.98	1.13					12,290	57
		X			3			44.0	43.9	12.1	4.9	67.0	1.2	6.4	8.4	0.09	7.13	1.15					12,570	
					4			50.1	49.9		5.6	76.3	1.3	7.3	9.5	0.10	8.12	1.31					14,310	
Franklin	Middle Kittanning (No. 6)	742A	1	1	2	37	4.9	42.5	47.5	5.1	5.6	71.6	1.3	12.9	3.5	0.30	1.22	2.00	1980	2030	2080	4	12,880	76
		1			3			44.7	49.9	5.4	5.3	75.4	1.4	8.8	3.7	0.31	1.28	2.10					13,540	
					4			47.3	52.7		5.6	79.7	1.5	9.3	3.9	0.33	1.36	2.22					14,320	
		742B	1	1	2	11	5.0	37.4	37.7	19.9	4.6	54.5	0.9	13.4	6.7	0.22	3.20	3.25	2030	2080	2140	2	9,980	76
		2			3			39.4	39.7	20.9	4.3	57.3	1.0	9.5	7.0	0.23	3.37	3.42					10,500	
					4			49.8	50.2		5.4	72.5	1.3	11.9	8.9	0.29	4.25	4.32					13,270	
		742A,B	1	1	2	48	4.9	41.3	45.3	8.5	5.4	67.7	1.2	13.0	4.2	0.28	1.67	2.28	1990	2040	2090		12,220	76
		9*			3			43.5	47.6	8.9	5.1	71.3	1.3	9.0	4.4	0.29	1.75	2.40					12,850	
					4			47.9	52.1		5.6	78.1	1.4	9.9	5.0	0.32	2.01	2.69					14,080	
		775A	1	1	2	12	5.2	37.8	40.1	16.9	4.8	57.2	1.0	11.2	8.9	0.96	5.19	2.72	1980	2030	2080	2½	10,510	76
		1			3			39.9	42.2	17.9	4.4	60.3	1.1	6.9	9.4	1.02	5.47	2.87					11,090	
					4			48.5	51.5		5.4	73.5	1.3	8.4	11.4	1.24	6.67	3.50					13,500	

		775B	1	1	2	37	2.7	43.4	47.6	6.3	5.4	70.5	1.2	12.3	4.3	0.03	2.11	2.16	2140	2190	2280	4½	12,880	76
		2			3			44.6	48.9	6.5	5.2	72.5	1.3	10.1	4.4	0.03	2.16	2.22					13,240	
					4			47.7	52.3		5.6	77.5	1.4	10.8	4.7	0.03	2.31	2.37					14,150	
		775A,B	1	1	2	49	3.3	42.0	45.8	8.9	5.3	67.2	1.2	12.0	5.4	0.25	2.86	2.24	2100	2150	2230		12,300	76
		9*			3			43.4	47.3	9.3	5.0	69.5	1.3	9.3	5.6	0.27	2.98	2.37					12,720	
					4			47.9	52.1		5.6	76.5	1.4	10.2	6.3	0.32	3.37	2.64					13,990	
Linton		781A	1	1	2	26	4.4	42.6	46.6	6.6	5.5	69.0	1.3	14.1	3.5	0.49	1.30	1.67	2030	2080	2140	4	12,580	76
		1			3			44.6	48.5	6.9	5.3	72.1	1.4	10.7	3.6	0.51	1.36	1.75					13,160	
					4			47.9	52.1		5.6	77.5	1.5	11.5	3.9	0.55	1.46	1.87					14,140	
		781B	1	1	2	12	4.5	43.9	49.1	2.5	5.8	73.3	1.4	14.7	2.3	0.09	0.97	1.27	2200	2250	4210	4	13,350	76
		2			3			45.9	51.5	2.6	5.6	76.7	1.5	11.2	2.4	0.09	1.02	1.34					13,980	
					4			47.2	52.8		5.7	78.8	1.5	11.5	2.5	0.10	1.04	1.37					14,350	
		781C	1	1	2	7	7.1	34.9	39.5	18.5	4.8	55.4	1.0	13.8	6.5	0.86	3.84	1.79	2030	2080	2130	2	10,030	76
		3			3			37.6	42.5	19.9	4.3	59.6	1.1	8.1	7.0	0.93	4.13	1.92					10,790	
					4			46.9	53.1		5.3	74.4	1.3	10.3	8.7	1.16	5.15	2.40					13,470	
		781A-C	1	1	2	45	4.8	41.8	46.1	7.3	5.5	68.1	1.3	14.2	3.6	0.43	1.59	1.57	2070	2120	2700		12,300	76
		9*			3			43.9	48.4	7.7	5.2	71.5	1.4	10.4	3.8	0.45	1.67	1.65					13,020	
					4			47.6	52.4		5.6	77.5	1.5	11.3	4.1	0.48	1.82	1.80					14,090	
		782A	1	1	2	24	4.0	44.8	45.9	5.3	5.7	70.5	1.3	13.2	4.0	0.52	1.67	1.77	1980	2030	2080	6½	12,860	76
		1			3			46.7	47.7	5.6	5.5	73.4	1.3	10.1	4.1	0.54	1.74	1.84					13,390	
					4			49.4	50.6		5.8	77.8	1.4	10.6	4.4	0.57	1.84	1.95					14,180	
		782B	1	1	2	11	3.2	52.5	38.1	6.2	5.5	70.3	1.1	13.3	3.6	0.56	1.25	1.84	1920	2060	2115	4½	12,730	76
		2			3			54.3	39.3	6.4	5.3	72.6	1.2	10.7	3.8	0.58	1.29	1.90					13,150	
					4			58.0	42.0		5.7	77.6	1.3	11.4	4.0	0.62	1.38	2.03					14,050	
		782C	1	1	2	10	2.9	34.4	40.5	22.2	4.5	57.3	0.8	10.7	4.5	0.31	2.17	1.98	2470	2570	2655	2½	10,270	76
		3			3			35.4	41.7	22.9	4.3	59.0	0.8	8.4	4.6	0.32	2.23	2.04					10,580	
					4			45.9	54.1		5.6	76.5	1.0	11.0	5.9	0.41	2.89	2.64					13,710	
		782A-C	1	1	2	45	3.6	44.2	42.7	9.5	5.4	67.4	1.1	12.6	4.0	0.48	1.68	1.83	2080	2160	2220		12,230	76
		9*			3			45.9	44.3	9.8	5.2	69.8	1.2	9.9	4.1	0.49	1.74	1.90					12,680	
					4			50.7	49.3		5.7	77.6	1.3	10.8	4.6	0.54	1.97	2.13					14,040	
Virginia	Lower Kittanning (No. 5)	745A	2	1	2	11	6.9	37.2	48.4	7.5	5.5	68.5	1.2	14.7	2.6	0.09	1.17	1.36	1920	1960	2000	4	12,220	76
		1			3			39.9	52.1	8.0	5.1	73.6	1.3	9.2	2.8	0.10	1.26	1.46					13,130	
					4			43.4	56.6		5.5	80.1	1.4	9.9	3.1	0.10	1.37	1.59					14,280	
		745B	2	1	2	10	6.1	41.1	44.9	7.9	5.4	68.3	1.2	13.4	3.8	0.15	2.51	1.18	1960	2010	2130	3½	12,370	76
		2			3			43.7	47.9	8.4	5.0	72.7	1.3	8.5	4.1	0.16	2.67	1.26					13,170	
					4			47.7	52.3		5.5	79.4	1.4	9.2	4.5	0.17	2.92	1.37					14,390	
		745C	2	1	2	6	6.9	40.6	43.8	8.7	5.6	67.2	0.8	13.7	4.0	0.12	2.13	1.79	1960	2010	2130	3½	12,170	76
		3			3			43.6	47.1	9.3	5.1	72.2	0.9	8.2	4.3	0.13	2.29	1.93					13,080	
					4			48.1	51.9		5.7	79.6	1.0	8.9	4.8	0.14	2.52	2.12					14,420	
		745D	2	1	2	9	6.0	42.9	44.9	6.2	5.7	69.1	1.3	13.7	4.0	0.09	2.12	1.81	1990	2040	2090	4	12,160	76
		4			3			45.6	47.8	6.6	5.3	73.5	1.4	8.9	4.3	0.09	2.26	1.93					13,410	
					4			48.8	51.2		5.7	78.7	1.5	9.5	4.6	0.10	2.42	2.07					14,360	
		745A-D	2	1	2	36	6.4	40.3	45.8	7.5	5.5	68.5	1.1	13.9	3.5	0.11	1.94	1.49	1960	2000	2080		12,350	76
		9*			3			43.0	49.0	8.0	5.1	73.1	1.2	8.8	3.8	0.11	2.07	1.60					13,190	
					4			46.8	53.2		5.6	79.5	1.3	9.5	4.1	0.12	2.25	1.73					14,340	
	Middle Kittanning (No. 6)	739	1	1	2	49	5.7	42.2	41.9	10.2	5.4	65.8	1.1	12.2	5.3	0.28	2.96	2.05	2030	2080	2140	4½	11,950	76
		X			3			44.7	44.5	10.8	5.0	69.8	1.2	7.6	5.6	0.29	3.14	2.17					12,670	
					4			50.1	49.9		5.6	78.2	1.3	8.6	6.3	0.33	3.52	2.43					14,200	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
COSHOCTON COUNTY (continued)																								
Virginia (continued)	Middle Kittanning (No. 6) (continued)	740A	2	1	2	20	5.5	42.5	46.9	5.1	5.4	71.2	1.3	13.1	3.9	0.01	1.76	2.13	2020	2070	2120	4	12,800	76
		1			3			44.9	49.7	5.4	5.1	75.4	1.4	8.6	4.1	0.01	1.86	2.26					13,540	
					4			47.5	52.5		5.4	79.6	1.4	9.2	4.4	0.01	1.96	2.38					14,310	
		740B	2	1	2	12	5.4	45.6	45.6	3.4	5.8	72.9	1.3	12.9	3.7	0.09	1.16	2.47	2150	2200	2250	3½	13,130	76
		2			3			48.2	48.2	3.6	5.5	77.1	1.4	8.5	3.9	0.09	1.23	2.61					13,880	
					4			50.0	50.0		5.7	79.9	1.4	8.9	4.1	0.10	1.28	2.70					14,440	
		740C	2	1	2	10	5.9	32.8	34.6	26.7	4.3	49.8	0.9	11.6	6.7	0.51	4.06	2.14	2180	2240	2300	2½	9,070	76
		3			3			34.9	36.8	28.3	3.8	52.9	0.9	7.0	7.1	0.54	4.31	2.27					9,640	
					4			48.7	51.3		5.3	73.8	1.3	9.7	9.9	0.76	6.01	3.17					13,450	
		740A-C	2	1	2	42	5.6	41.0	43.5	9.9	5.2	66.5	1.2	12.7	4.5	0.15	2.15	2.22	2090	2150	2200		11,980	76
		9*			3			43.4	46.1	10.5	4.9	70.3	1.3	8.2	4.8	0.16	2.29	2.36					12,680	
					4			48.5	51.5		5.5	78.3	1.4	9.2	5.6	0.21	2.75	2.66					14,140	
GALLIA COUNTY																								
Springfield	Lower Freeport (No. 6A)	714	3	3	1	25	5.2	38.7	47.0	9.1					3.7	0.12	3.05	0.55					11,890	70
		X			3			40.8	49.6	9.6					3.9	0.13	3.21	0.58					12,540	
					4			45.2	54.8						4.3	0.14	3.56	0.64					13,880	
GUERNSEY COUNTY																								
Liberty	Middle Kittanning (No. 6)	628A	3	3	2	38	2.4	41.6	47.2	8.8					5.8								12,700	59
		X			3			42.6	48.4	9.0					5.9								13,010	
					4			46.8	53.2						6.5								14,300	
		628B	3	3	2	29	2.6	41.3	45.9	10.2					7.5								12,100	59
		X			3			42.4	47.1	10.5					7.7								12,420	
					4			47.4	52.6						8.6								13,880	
		628C	3	3	2	15	2.4	43.0	47.4	7.2					3.6								12,920	59
		X			3			44.1	48.5	7.4					3.7								13,240	
					4			47.6	52.4						4.0								14,290	
		628D	3	3	2	41	2.9	42.9	47.6	6.6					3.2								13,180	59
		X			3			44.2	49.0	6.8					3.3								13,570	
					4			47.4	52.6						3.5								14,560	
		628E	3	3	2	34	2.6	43.5	48.3	5.6					3.4								13,330	59
		X			3			44.7	49.6	5.7					3.5								13,690	
					4			47.4	52.6						3.7								14,520	
		628F	3	3	2	16*	2.5	36.2	45.1	16.2					6.5								11,470	59
		X			3			37.1	46.3	16.6					6.7								11,760	
					4			44.5	55.5						8.0								14,110	
Oxford	Pittsburgh (No. 8)	803	2	1	2	42	4.3	36.6	48.2	10.9	5.2	67.1	1.0	12.4	3.4	0.39	1.85	1.13	1875	2010	2090	6	12,090	76
		X			3			38.2	50.4	11.4	4.9	70.1	1.1	9.0	3.5	0.40	1.93	1.18					12,630	
					4			43.1	56.9		5.6	79.1	1.2	10.1	4.0	0.46	2.18	1.34					14,250	

HARRISON COUNTY																										
Athens	Meigs Creek (No. 9)	737A	1	1	2	30	3.0	40.1	46.4	10.5	5.5	70.0	1.4	9.8	2.8	0.06	1.74	0.97	2200	2250	2300	4	12,650	76
		1			3			41.4	47.8	10.8	5.3	72.1	1.4	7.5	2.9	0.06	1.79	1.00					13,040	
					4			46.4	53.6		5.9	80.9	1.6	8.4	3.2	0.07	2.01	1.12					14,610	
		737B	1	1	2	22	3.2	35.1	45.6	16.1	5.0	65.3	1.2	10.8	1.6	0.02	0.68	0.90	2910+			5	11,630	76
		2			3			36.3	47.0	16.7	4.7	67.5	1.3	8.1	1.7	0.02	0.70	0.93					12,020	
					4			43.6	56.4		5.7	81.0	1.5	9.8	2.0	0.02	0.85	1.12					14,420	
		737A,B	1	1	2	52	3.1	38.0	46.1	12.8	5.3	68.0	1.4	10.2	2.3	0.04	1.29	0.92	2490				12,220	76
		9*			3			39.2	47.6	13.2	5.1	70.2	1.4	7.7	2.3	0.04	1.33	0.96					12,610	
					4			45.2	54.8		5.9	80.9	1.7	8.8	2.7	0.04	1.52	1.12					14,530	
		784A	1	1	2	17	4.0	39.2	47.8	9.0	5.5	70.4	1.4	11.7	2.0	0.07	1.09	0.80	2340	2390	2450	4	12,360	76
		1			3			40.8	49.8	9.4	5.2	73.3	1.5	8.5	2.1	0.07	1.13	0.93					13,160	
					4			45.0	55.0		5.8	80.9	1.6	9.3	2.4	0.08	1.25	1.02					14,520	
		784B	1	1	2	13	4.7	34.0	52.4	8.9	5.2	70.1	1.4	13.1	1.3	0.04	0.40	0.87	2740	2910+		3½	12,520	76
		2			3			35.7	55.0	9.3	4.9	73.5	1.4	9.5	1.4	0.04	0.42	0.92					13,140	
					4			39.4	60.6		5.4	81.1	1.6	10.4	1.5	0.05	0.47	1.01					14,490	
		784C	1	1	2	10	4.2	34.1	52.6	9.1	5.2	69.9	1.3	13.3	1.2	0.01	0.40	0.83	2670	2730	2790	3	12,440	76
		3			3			35.6	54.9	9.5	4.9	72.9	1.4	10.0	1.3	0.01	0.42	0.86					12,990	
					4			39.3	60.7		5.4	80.5	1.5	11.2	1.4	0.01	0.47	0.95					14,350	
		784A-C	1	1	2	40	4.3	36.2	50.5	9.0	5.3	70.2	1.4	12.5	1.6	0.04	0.69	0.83	2550	2640			12,540	76
		9*			3			37.8	52.8	9.4	5.0	73.3	1.5	9.1	1.7	0.04	0.71	0.91					13,100	
					4			41.8	58.2		5.6	80.9	1.6	10.1	1.8	0.04	0.79	0.97					14,460	
		792A	1	1	2	19	2.4	37.5	49.6	10.5	5.2	70.0	1.3	10.1	2.9	0.02	1.65	1.25	2130	2180	2280	4½	12,510	76
		1			3			38.4	50.8	10.8	5.1	71.7	1.3	8.1	3.0	0.02	1.69	1.28					12,820	
					4			43.0	57.0		5.7	80.4	1.5	9.0	3.4	0.02	1.90	1.44					14,370	
		792B	1	1	2	12	4.5	35.8	50.1	9.6	5.2	69.9	1.4	12.2	1.7	0.17	0.52	1.00	2580	2630	2830	6	12,450	76
		2			3			37.5	52.5	10.0	4.9	73.2	1.4	8.7	1.8	0.18	0.55	1.05					13,030	
					4			41.7	58.3		5.5	81.4	1.6	9.5	2.0	0.20	0.61	1.16					14,490	
		792C	1	1	2	14	3.7	35.9	51.6	8.8	5.3	69.9	1.4	12.2	2.4	0.30	1.23	0.85	2080	2185	2220	6	12,500	76
		3			3			37.3	53.6	9.1	5.1	72.5	1.4	9.4	2.5	0.31	1.28	0.88					12,970	
					4			41.0	59.0		5.6	79.8	1.6	10.3	2.7	0.34	1.41	0.97					14,270	
		792A-C	1	1	2	45	3.4	36.6	50.3	9.7	5.2	70.0	1.4	11.3	2.4	0.14	1.22	1.06	2230	2300	2400		12,490	76
		9*			3			37.9	52.1	10.0	5.0	72.5	1.4	8.6	2.5	0.15	1.27	1.09					12,890	
					4			42.1	57.9		5.6	80.5	1.6	9.5	2.8	0.16	1.41	1.22					14,370	
Cadiz	Lower Freeport (No. 6A)	736	1	1	2	44	3.5	39.4	48.7	8.4	5.4	71.9	1.5	9.5	3.3	0.17	2.52	0.57	1980	2030	2130	3½	13,050	76
		X			3			40.9	50.4	8.7	5.1	74.5	1.5	6.8	3.4	0.18	2.61	0.59					13,530	
					4			44.8	55.2		5.6	81.6	1.7	7.4	3.7	0.19	2.86	0.64					14,820	
		813	1	1	2	50	3.2	37.3	50.5	9.0	5.2	71.5	1.4	9.1	3.8	0.25	2.74	0.77	2020	2070	2120	5	12,740	76
		X			3			38.5	52.2	9.3	5.0	73.8	1.4	6.6	3.9	0.26	2.83	0.80					13,160	
					4			42.5	57.5		5.5	81.4	1.6	7.2	4.3	0.28	3.12	0.88					14,510	
	Pittsburgh (No. 8)	796	2	1	2	51	2.8	37.8	50.1	9.3	5.2	69.3	1.3	11.5	3.4	0.29	1.55	1.57	2070	2110	2150	5	12,620	76
		X			3			38.9	51.5	9.6	5.0	71.3	1.3	9.3	3.5	0.30	1.59	1.61					12,990	
					4			43.0	57.0		5.5	78.9	1.5	10.2	3.9	0.33	1.76	1.78					14,360	
Greene	Lower Freeport (No. 6A)	718	1	1	1	65	2.0	40.5	49.1	8.4	5.1	73.7	1.4	8.2	3.2				2090	2140	2190	4	13,260	76
		X			2		2.1	40.4	49.1	8.4	5.1	73.6	1.4	8.3	3.2	0.08	2.18	0.98					13,240	
					3			41.3	50.1	8.6	5.0	75.2	1.4	6.5	3.3	0.08	2.22	1.00					13,530	
					4			45.2	54.8		5.4	82.2	1.6	7.2	3.6	0.09	2.43	1.09					14,790	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
HARRISON COUNTY (continued)																								
Greene (continued)	Lower Freeport (No. 6A) (continued)	719	1	1	1	62	2.0	40.5	50.4	7.1	5.4	75.2	1.4	8.2	2.7				2130	2180	2240	4½	13,470	76
		X			2		2.2	40.5	50.2	7.1	5.4	75.0	1.4	8.5	2.6	0.07	1.67	0.91					13,450	
					3			41.4	51.4	7.2	5.3	76.7	1.5	6.6	2.7	0.07	1.70	0.93					13,750	
					4			44.6	55.4		5.6	82.7	1.6	7.2	2.9	0.08	1.84	1.00					14,820	
		720	1	1	1	61	2.1	37.9	50.9	9.1	5.4	72.4	1.2	8.9	3.0				2090	2140	2190	5½	13,150	76
		X			2		2.4	37.8	50.7	9.1	5.4	72.2	1.2	9.1	3.0	0.07	2.34	0.59					13,110	
					3			38.7	52.0	9.3	5.2	74.0	1.3	7.1	3.1	0.07	2.40	0.60					13,430	
					4			42.7	57.3		5.8	81.6	1.4	7.8	3.4	0.08	2.65	0.66					14,810	
		721	1	1	1	63	2.1	39.5	48.9	9.5	5.2	72.5	1.4	8.2	3.2				2110	2120	2230	5	13,010	76
		X			2		2.3	39.4	48.8	9.5	5.2	72.4	1.4	8.3	3.2	0.08	2.47	0.69					12,990	
					3			40.3	50.0	9.7	5.1	74.0	1.4	6.5	3.3	0.08	2.52	0.70					13,290	
					4			44.7	55.3		5.6	82.0	1.6	7.1	3.7	0.09	2.79	0.78					14,710	
		809	1	1	2	74	3.3	36.8	53.2	6.7	5.4	74.6	1.5	9.9	1.9	0.05	1.00	0.81	2100	2150	2200	6	13,290	76
		X			3			38.0	55.1	6.9	5.2	77.1	1.6	7.3	1.9	0.05	1.03	0.84					13,740	
					4			40.8	59.2		5.6	82.8	1.7	7.8	2.1	0.05	1.11	0.90					14,750	
		810	1	1	2	71	3.1	35.7	53.3	7.9	5.2	73.3	1.5	9.9	2.2	0.10	1.32	0.75	2140	2190	2310	6	13,090	76
		X			3			36.9	55.0	8.1	5.0	75.7	1.6	7.4	2.2	0.10	1.36	0.78					13,520	
					4			40.2	59.8		5.5	82.4	1.7	8.0	2.4	0.10	1.48	0.85					14,710	
		811A	1	1	2	34	3.3	37.5	50.1	9.1	5.2	72.0	1.4	8.9	3.4	0.19	2.07	1.18	2090	2140	2190	6½	12,760	76
		1			3			38.8	51.8	9.4	5.0	74.4	1.4	6.3	3.5	0.19	2.14	1.22					13,190	
					4			42.8	57.2		5.5	82.2	1.5	6.9	3.9	0.21	2.36	1.34					14,560	
		811B	1	1	2	40	2.2	33.8	44.8	19.2	4.7	63.7	1.3	9.0	2.1	0.07	1.25	0.73	2460	2520	2620	6	11,430	76
		2			3			34.6	45.7	19.7	4.5	65.1	1.3	7.3	2.1	0.07	1.28	0.74					11,690	
					4			43.1	56.9		5.6	81.1	1.6	9.1	2.6	0.09	1.60	0.92					14,550	
		811A,B	1	1	2	74	2.7	35.5	47.2	14.6	4.9	67.5	1.3	9.0	2.7	0.12	1.62	0.93	2290	2340	2420		12,040	76
		9*			3			36.5	48.5	15.0	4.7	69.4	1.3	6.9	2.7	0.12	1.67	0.96					12,380	
					4			43.0	57.0		5.6	81.6	1.5	8.1	3.2	0.14	1.94	1.11					14,550	
		812A	1	1	2	32	3.1	35.3	51.8	9.8	5.2	71.8	1.4	8.8	3.0	0.12	1.71	1.19	2130	2180	2300	5	12,730	76
		1			3			36.4	53.5	10.1	5.0	74.1	1.4	6.3	3.1	0.12	1.76	1.23					13,130	
					4			40.5	59.5		5.5	82.5	1.6	6.9	3.5	0.14	1.96	1.37					14,610	
		812B	1	1	2	39	3.2	34.1	50.2	12.5	5.0	69.0	1.4	10.0	2.1	0.11	1.16	0.82	2140	2260	2380	6½	12,340	76
		2			3			35.3	51.8	12.9	4.8	71.3	1.5	7.3	2.2	0.11	1.20	0.85					12,740	
					4			40.5	59.5		5.5	81.9	1.7	8.4	2.5	0.13	1.38	0.98					14,630	
		812A,B	1	1	2	71	3.2	34.6	50.9	11.3	5.1	70.2	1.4	9.5	2.5	0.11	1.40	0.98	2130	2220	2340		12,520	76
		9*			3			35.7	52.6	11.7	4.9	72.5	1.4	6.9	2.6	0.11	1.45	1.02					12,920	
					4			40.5	59.5		5.5	82.1	1.7	7.8	2.9	0.13	1.64	1.15					14,620	
Monroe	Upper Freeport (No. 7)	624A	2	3	2	7	4.5	30.7	52.7	12.1					2.9	0.26	2.04	0.59					9,969	58
		1			3			32.2	55.2	12.6					3.0	0.27	2.14	0.62					10,440	
					4			36.8	63.2						3.5	0.31	2.45	0.71					11,945	

		624B	2	3	2	7	4.6	34.3	49.0	12.1					1.4	0.17	0.69	0.56					12,070	58
		2			3			36.0	51.3	12.7					1.5	0.18	0.72	0.59					12,650	
					4			41.2	58.8						1.7	0.21	0.82	0.68					14,490	
		624C	2	3	2	30	4.6	38.4	49.9	7.1					1.6	0.13	0.92	0.52					12,920	58
		3			3			40.2	52.4	7.4					1.6	0.14	0.96	0.55					13,540	
					4			43.4	56.6						1.8	0.15	1.04	0.59					14,620	
		624A-C	2	3	2	44	5.1	34.9	48.0	12.0					1.8	0.22	1.01	0.54					11,900	58
		9			3			36.8	50.5	12.7					1.9	0.23	1.06	0.57					12,540	
					4			42.2	57.8						2.1	0.26	1.22	0.65					14,360	
		624A-C	2	3	2	44	4.6	36.5	50.2	8.7					1.7	0.15	1.06	0.54					12,310	58
		9*			3			38.2	52.7	9.1					1.8	0.16	1.10	0.56					12,480	
					4			42.0	58.0						2.0	0.18	1.22	0.62					14,170	
Short Creek	Meigs Creek (No. 9)	797	1	1	2	34	3.1	35.1	51.7	10.1	5.1	70.2	1.3	11.4	1.9	0.12	0.63	1.17	2480	2530	2640	4	12,570	76
		X			3			36.2	53.4	10.4	4.9	72.4	1.3	9.0	2.0	0.12	0.66	1.21					12,970	
					4			40.4	59.6		5.5	80.9	1.5	9.9	2.2	0.14	0.73	1.35					14,470	
HOCKING COUNTY																										
Ward	Lower Kittanning (No. 5)	627A1	2	3	2	6	11.1	34.8	44.3	9.8					2.4								10,990	59
		1			3			39.1	49.9	11.0					2.7								12,360	
					4			44.0	56.0						3.1								13,890	
		627A2	2	3	2	12	11.1	34.1	41.0	13.8					0.8								10,060	59
		2			3			38.4	46.1	15.5					0.9								11,320	
					4			45.4	54.6						1.1								13,400	
		627A1,A2	2	3	2	18	11.1	34.6	42.3	12.0					1.3	0.15	0.61	0.56					10,450	59
		9			3			38.9	47.6	13.5					1.5	0.17	0.69	0.63					11,750	
					4			45.0	55.0						1.7	0.20	0.79	0.73					13,590	
		627A1,A2	2	3	2	18	11.1	34.3	42.1	12.5					1.4								10,370	59
		9*			3			38.6	47.3	14.1					1.5								11,670	
					4			44.9	55.1						1.8								13,560	
		627B1	2	3	2	8	11.6	36.4	47.1	4.9					0.8								11,500	59
		1			3			41.2	53.3	5.5					1.0								13,100	
					4			43.6	56.4						1.0								13,770	
		627B2	2	3	2	13	11.6	36.6	43.0	8.8					0.5								10,690	59
		2			3			41.4	48.6	10.0					0.6								12,090	
					4			46.0	54.0						0.7								13,430	
		627B1,B2	2	3	2	21	11.6	36.4	44.8	7.2					0.7	0.04	0.05	0.66					11,010	59
		9			3			41.2	50.7	8.1					0.8	0.05	0.06	0.74					12,450	
					4			44.8	55.2						0.9	0.05	0.06	0.81					13,560	
		627B1,B2	2	3	2	21	11.6	36.5	44.5	7.4					0.7								10,990	59
		9*			3			41.3	50.4	8.3					0.7								12,460	
					4			45.1	54.9						0.8								13,560	
HOLMES COUNTY																										
Walnut Creek	Lower Kittanning (No. 5)	614A1	2	3	2	15	6.5	39.5	46.0	8.0					5.4	0.24	3.45	1.67					12,230	57
		1			3			42.2	49.2	8.6					5.7	0.26	3.69	1.78					13,080	
					4			46.2	53.8						6.3	0.28	4.04	1.95					14,310	
		614A2	2	3	2	5	5.7	39.0	42.2	13.1					10.7	0.18	8.89	1.68					11,530	57
		2			3			41.4	44.7	13.9					11.4	0.19	9.43	1.78					12,210	
					4			48.1	51.9						13.2	0.22	10.95	2.07					14,180	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
HOLMES COUNTY (continued)																								
Walnut Creek (continued)	Lower Kittanning (No. 5) (continued)	614A3	2	3	2	22	6.3	40.1	45.4	8.2					4.1	0.05	2.28	1.82					12,240	57
		3			3			42.8	48.4	8.8					4.2	0.05	2.43	1.73					13,060	
					4			46.9	53.1						4.6	0.05	2.66	1.90					14,320	
		614A4	2	3	2	2	6.7	31.9	37.4	24.0					11.2	0.28	9.93	1.04					9,610	57
		4			3			34.2	40.1	25.7					12.1	0.30	10.64	1.12					10,300	
					4			46.0	54.0						16.2	0.40	14.32	1.51					13,865	
		614A1-4	2	3	2	44	6.3	39.4	44.8	9.5					5.7	0.14	3.82	1.71					12,020	57
		9*			3			42.0	47.8	10.2					5.9	0.15	4.08	1.72					12,830	
					4			46.8	53.2						6.7	0.16	4.54	2.03					14,280	
		614B	2	3	2	48	2.0	40.5	43.3	14.2	4.8	63.9	1.1	7.1	8.9	0.12	7.40	1.44					11,950	57
		X			3			41.3	44.2	14.5	4.7	65.2	1.1	5.4	9.1	0.12	7.55	1.46					12,200	
					4			48.3	51.7		5.5	76.2	1.3	6.3	10.7	0.14	8.83	1.71					14,250	
	Middle Kittanning (No. 6)	613-1	2	3	2	11	3.1	40.9	51.9	4.1					2.3	0.05	1.40	0.82					13,380	56
		1			3			42.2	53.6	4.2					2.3	0.05	1.44	0.85					13,810	
					4			44.1	55.9						2.4	0.05	1.50	0.89					14,420	
		613-2	2	3	2	12	2.9	41.3	52.2	3.6					1.6	0.06	0.95	0.57					13,610	56
		2			3			42.5	53.8	3.7					1.6	0.06	0.98	0.59					14,020	
					4			44.1	55.9						1.7	0.06	1.02	0.60					14,560	
		613-3	2	3	2	8	2.3	40.9	52.3	4.5					1.7	0.01	1.22	0.52					13,630	56
		3			3			41.9	53.5	4.6					1.8	0.02	1.25	0.53					13,950	
					4			43.9	56.1						1.9	0.02	1.30	0.55					14,620	
		613-1-3	2	3	2	31	2.8	41.1	52.1	4.0					1.9	0.04	1.18	0.64					13,530	56
		9*			3			42.3	53.6	4.1					1.9	0.04	1.21	0.65					13,920	
					4			44.1	55.9						2.0	0.04	1.26	0.68					14,520	
JACKSON COUNTY																								
Bloomfield	Lower Kittanning (No. 5)	637	2	3	2	29	4.3	36.8	48.8	10.1					1.9								12,190	62
		X			3			38.4	51.0	10.6					2.0								12,740	
					4			42.9	57.1						2.2								14,260	
Madison		616A1	2	3	2	8	8.6	27.9	36.2	27.3					2.2	0.02	1.56	0.67					8,740	57
		1			3			30.5	39.6	29.9					2.5	0.02	1.69	0.75					9,570	
					4			43.5	56.5						3.5	0.03	2.41	1.07					13,650	
		616A2	2	3	2	16	9.7	32.1	46.9	11.3					1.1	0.01	0.55	0.56					11,210	57
		2			3			35.6	52.0	12.4					1.3	0.01	0.60	0.69					12,410	
					4			40.6	59.4						1.4	0.01	0.69	0.72					14,170	
		616A3	2	3	2	6	11.7	33.1	52.0	3.2					1.0	0.01	0.57	0.46					12,210	57
		3			3			37.5	58.9	3.6					1.2	0.01	0.64	0.52					13,830	
					4			38.9	61.1						1.2	0.01	0.66	0.54					14,350	

		616A4	2	3	2	6	7.8	41.4	48.0	2.8					0.7	0.01	0.15	0.59					12,950	57
		4			3			44.9	52.1	3.0					0.8	0.01	0.16	0.64					14,050	
					4			46.3	53.7						0.8	0.01	0.17	0.66					14,480	
		616A1-4	2	3	2	36	9.5	32.8	45.6	12.1					1.3	0.01	0.72	0.57					11,110	57
		9*			3			36.2	50.4	13.4					1.4	0.01	0.80	0.62					12,270	
					4			41.8	58.2						1.6	0.01	0.92	0.72					14,170	
		616B1	2	3	2	9	8.6	30.9	38.8	21.7					2.7	0.04	1.95	0.70					9,640	57
		1			3			33.8	42.5	23.7					2.9	0.04	2.13	0.77					10,550	
					4			44.3	55.7						3.8	0.05	2.79	1.01					13,830	
		616B2	2	3	2	16	9.7	33.5	47.6	9.2					1.1	0.01	0.53	0.58					11,480	57
		2			3			37.1	52.7	10.2					1.2	0.01	0.58	0.65					12,710	
					4			41.3	58.7						1.4	0.01	0.65	0.72					14,150	
		616B3	2	3	2	6	10.4	35.9	50.5	3.2					1.2	0.01	0.69	0.46					12,260	57
		3			3			40.0	56.4	3.6					1.3	0.01	0.76	0.51					13,680	
					4			41.5	58.5						1.3	0.01	0.79	0.53					14,190	
		616B4	2	3	2	4	8.6	40.2	46.8	4.4					1.0	0.01	0.51	0.52					12,550	57
		4			3			44.0	51.2	4.8					1.1	0.01	0.55	0.56					13,770	
					4			46.2	53.8						1.2	0.01	0.58	0.59					14,460	
		616B1-4	2	3	2	35	9.3	33.9	45.7	11.1					1.5	0.02	0.92	0.58					11,240	57
		9*			3			37.4	50.4	12.2					1.7	0.02	1.02	0.65					12,400	
					4			42.6	57.4						1.9	0.02	1.16	0.74					14,120	
JEFFERSON COUNTY																										
Mt. Pleasant	Waynesburg (No. 11)	780A	2	1	2	14	4.0	35.4	45.7	14.9	4.9	63.9	1.3	10.4	4.6	0.20	3.40	1.02	2030	2080	2130	5	11,570	76
		1			3			36.9	47.6	15.5	4.6	66.6	1.4	7.1	4.8	0.21	3.54	1.06					12,050	
					4			43.6	46.4		5.5	78.8	1.6	8.4	5.7	0.24	4.19	1.25					14,260	
		780B	2	1	2	7	3.4	34.8	48.4	13.4	4.9	66.5	1.4	10.6	3.2	0.15	2.50	0.56	2040	2090	2140	5	11,950	76
		2			3			36.1	50.1	13.8	4.6	68.8	1.4	8.1	3.3	0.15	2.59	0.58					12,370	
					4			41.8	58.2		5.4	79.9	1.7	9.1	3.9	0.18	3.01	0.68					14,360	
		780C	2	1	2	11	3.9	30.4	42.1	23.6	4.4	57.5	1.2	10.3	3.0	0.21	1.95	0.89	2140	2190	2310	5	10,250	76
		3			3			31.6	43.9	24.5	4.2	59.8	1.3	7.0	3.2	0.22	2.03	0.92					10,660	
					4			41.8	58.2		5.5	79.3	1.7	9.3	4.2	0.29	2.69	1.22					14,130	
		780D(A-C)	2	1	2	32	3.1	33.7	45.6	17.6	4.8	62.4	1.2	10.8	3.2	0.20	2.01	1.00	2060	2110	2160	5½	11,290	76
		9			3			34.8	47.0	18.2	4.6	64.4	1.5	8.0	3.3	0.21	2.08	1.03					11,650	
					4			42.5	57.5		5.6	78.7	1.5	10.2	4.0	0.25	2.54	1.26					14,230	
		780A-C	2	1	2	32	3.8	33.5	45.1	17.6	4.7	62.2	1.3	10.4	3.8	0.19	2.70	0.87	2070	2120	2190		11,190	76
		9*			3			34.8	46.9	18.3	4.4	64.7	1.4	7.3	3.9	0.20	2.81	0.90					11,630	
					4			42.6	57.4		5.5	79.1	1.7	8.9	4.8	0.24	3.41	1.11					14,240	
		787A	2	1	2	13	3.0	35.0	44.3	17.7	4.8	60.8	0.8	10.8	5.1	0.61	3.10	1.42	2020	2080	2130	6	11,060	76
		1			3			36.1	45.7	18.2	4.6	62.7	0.9	8.3	5.3	0.63	3.19	1.47					11,410	
					4			44.1	55.9		5.6	76.6	1.0	10.3	6.5	0.77	3.90	1.80					13,950	
		787B	2	1	2	10	2.9	33.7	47.5	15.9	4.9	64.7	0.9	10.8	2.8	0.18	1.41	1.23	2320	2405	2450	6½	11,580	76
		2			3			34.9	48.7	16.4	4.7	66.6	0.9	8.5	2.9	0.18	1.44	1.25					11,930	
					4			41.5	58.5		5.5	80.0	1.1	10.0	3.4	0.22	1.72	1.50					14,270	
		787C	2	1	2	14	3.2	33.4	47.4	16.0	4.8	63.4	1.0	11.3	3.5	0.27	1.89	1.34	2090	2200	2280	6½	11,470	76
		3			3			34.5	48.9	16.6	4.6	65.4	1.0	8.8	3.6	0.28	1.95	1.38					11,840	
					4			41.3	58.7		5.5	78.4	1.2	10.6	4.3	0.33	2.34	1.65					14,190	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
JEFFERSON COUNTY (continued)																								
Mt. Pleasant (continued)	Waynesburg (No. 11) (continued)	787D(A-C)	2	1	2	37	3.6	36.3	42.8	17.3	5.0	61.9	1.2	10.8	3.8	0.36	2.31	1.10	2090	2140	2190	5½	11,200	76
		9			3			37.7	44.3	18.0	4.7	64.1	1.3	8.0	3.9	0.37	2.39	1.14					11,610	
					4			45.9	54.1		5.8	78.2	1.5	9.7	4.8	0.45	2.91	1.39					14,150	
		787A-C	2	1	2	37	3.0	34.0	46.4	16.6	4.8	62.9	0.9	11.0	3.8	0.36	2.16	1.33	2130	2220	2280		11,360	76
		9*			3			35.1	47.8	17.1	4.6	64.8	0.9	8.6	4.0	0.37	2.23	1.37					11,710	
					4			42.3	57.7		5.5	78.2	1.1	10.4	4.8	0.44	2.69	1.65					14,130	
		790A	2	1	2	17	7.3	32.3	42.4	18.0	4.8	58.5	1.0	16.7	1.0	0.10	0.21	0.67	2580	2630	2740	½	10,380	76
		1			3			34.9	45.7	19.4	4.2	63.1	1.1	11.1	1.1	0.11	0.23	0.73					11,190	
					4			43.3	56.7		5.3	78.3	1.3	13.8	1.3	0.13	0.29	0.90					13,880	
		790B	2	1	2	21	2.8	34.2	49.3	13.7	4.9	66.9	1.4	11.9	1.2	0.03	0.51	0.64	2630	2680	2780	2	11,860	76
		2			3			35.2	50.7	14.1	4.7	68.9	1.4	9.7	1.2	0.03	0.52	0.66					12,280	
					4			40.9	59.1		5.5	80.2	1.6	11.3	1.4	0.04	0.61	0.76					14,200	
		790A,B	2	1	2	28	4.8	33.3	46.3	15.6	4.9	63.1	1.2	14.1	1.1	0.06	0.37	0.65	2610	2660	2760		11,190	76
		9*			3			35.0	48.6	16.4	4.6	66.3	1.3	10.3	1.1	0.06	0.38	0.69					11,790	
					4			41.8	58.2		5.5	79.3	1.5	12.3	1.4	0.08	0.46	0.82					14,050	
Salem	Lower Freeport (No. 6A)	735	1	1	2	43	2.0	34.4	44.6	19.0	4.8	64.9	1.1	6.6	3.6	0.16	2.98	0.42	2120	2170	2270	6	11,620	76
		X			3			35.1	45.5	19.4	4.7	66.2	1.2	4.9	3.6	0.16	3.04	0.43					11,860	
					4			43.6	56.4		5.8	82.1	1.4	6.2	4.5	0.20	3.77	0.53					14,710	
		736A	1	1	2	39	2.0	37.8	46.7	13.5	5.0	68.8	1.3	6.9	4.5	0.20	3.89	0.42	1990	2040	2090	4½	12,400	76
		X			3			38.6	47.6	13.8	4.8	70.1	1.3	5.4	4.6	0.20	3.97	0.43					12,650	
					4			44.7	55.3		5.6	81.4	1.5	6.2	5.3	0.24	4.60	0.50					14,670	
Wayne	Pittsburgh (No. 8)	785A	2	1	2	6	2.3	38.0	51.6	8.1	5.2	71.7	1.3	9.9	3.8	0.14	1.88	1.75	2070	2100	2130	5½	13,070	76
		1			3			38.9	52.8	8.3	5.0	73.4	1.3	8.1	3.9	0.14	1.93	1.79					13,370	
					4			42.4	57.6		5.5	80.0	1.4	8.9	4.2	0.16	2.10	1.95					14,580	
		785B	2	1	2	5	2.6	38.0	51.4	8.0	5.1	70.4	1.3	10.3	4.9	0.13	2.98	1.84	2070	2100	2130	6	12,910	76
		2			3			39.0	52.8	8.2	4.9	72.3	1.4	8.1	5.1	0.13	3.06	1.89					13,260	
					4			42.5	57.5		5.4	78.7	1.5	8.9	5.5	0.14	3.33	2.06					14,440	
		785C	2	1	2	8	3.7	36.5	53.4	6.4	5.2	72.5	1.3	11.5	3.1	0.20	1.25	1.61	2030	2080	2130	7	13,090	76
		3			3			37.9	55.5	6.6	5.0	75.3	1.3	8.6	3.2	0.21	1.30	1.67					13,600	
					4			40.6	59.4		5.3	80.7	1.4	9.2	3.4	0.22	1.40	1.79					14,550	
		785D	2	1	2	6	3.3	40.4	48.9	7.4	5.1	72.8	1.4	10.3	3.0	0.08	1.69	1.24	2040	2090	2140	7½	13,100	76
		4			3			41.8	50.5	7.7	4.9	75.3	1.4	7.6	3.1	0.08	1.75	1.28					13,550	
					4			45.3	54.7		5.3	81.5	1.6	8.2	3.4	0.09	1.89	1.39					14,670	
		785E	2	1	2	8	3.1	30.3	42.7	23.9	4.3	57.9	1.1	9.8	3.0	0.20	1.68	1.09	2400	2450	2590	3½	10,450	76
		5			3			31.2	44.1	24.7	4.1	59.7	1.1	7.4	3.0	0.20	1.72	1.13					10,780	
					4			41.4	58.6		5.4	79.3	1.5	9.8	4.0	0.27	2.28	1.49					14,320	
		785F	2	1	2	8	3.0	36.5	54.4	6.1	5.2	72.8	1.3	11.5	3.1	0.23	1.37	1.55	2060	2100	2140	7	13,140	76
		6			3			37.6	56.1	6.3	5.0	75.1	1.4	9.0	3.2	0.23	1.41	1.59					13,540	
					4			40.1	59.9		5.3	80.1	1.5	9.6	3.5	0.25	1.50	1.70					14,450	

		785G	2	1	2	11	1.8	34.5	52.6	11.1	4.9	70.4	1.3	9.9	2.4	0.01	1.15	1.27	2320	2370	2430	7	12,690	76
		7			3			35.2	53.5	11.3	4.8	71.7	1.3	8.4	2.5	0.01	1.17	1.29					12,930	
					4			39.7	60.3		5.4	80.9	1.5	9.4	2.8	0.01	1.32	1.46					14,570	
		785H(A-G)	2	1	2	52	1.9	37.7	51.0	9.4	5.1	71.4	1.3	9.7	3.1	0.02	1.78	1.32	2000	2050	2100	5	12,840	76
		9			3			38.4	52.1	9.5	4.9	72.8	1.3	8.3	3.2	0.02	1.82	1.34					13,090	
					4			42.5	57.5		5.5	80.5	1.4	9.1	3.5	0.02	2.01	1.48					14,470	
		785A-G	2	1	2	52	2.8	35.9	50.8	10.5	5.0	69.6	1.3	10.4	3.2	0.13	1.60	1.44	2160	2200	2260		12,590	76
		9*			3			36.9	52.3	10.8	4.8	71.6	1.3	8.2	3.3	0.13	1.65	1.48					12,950	
					4			41.4	58.6		5.4	80.2	1.5	9.2	3.7	0.15	1.85	1.66					14,520	
LAWRENCE COUNTY																									
Elizabeth	Lower Kittanning (No. 5)	617A1	2	3	1	8	2.8	41.0	49.6	6.6					1.9										57
		1			2*		7.2	39.1	47.4	6.3					1.8								12,310		
					3			42.1	51.1	6.8					1.9								13,260		
					4			45.2	54.8						2.0								14,230		
		617A2	2	3	1	12	2.7	35.1	44.0	18.2					1.3										57
		2			2*		7.5	33.4	41.8	17.3					1.3								10,710		
					3			36.1	45.2	18.7					1.4								11,580		
					4			44.4	55.6						1.7								14,270		
		617A3	2	3	1	14	2.3	42.0	44.5	12.2					2.8										57
		3			2*		7.1	39.9	42.4	10.6					2.5								11,820		
					3			42.9	45.7	11.4					2.7								12,720		
					4			48.5	51.5						3.1								14,360		
		617A4	2	3	1	7	2.0	34.9	35.0	28.1					6.3										57
		4			2*		7.1	33.2	33.0	26.7					6.0								9,080		
					3			35.7	35.6	28.7					6.5								9,770		
					4			50.2	49.8						9.1								13,720		
		617A1-4	2	3	1	41	3.1	39.0	42.8	15.1	5.0	63.9	1.3	11.5	3.2										57
		9			2*		7.2	37.3	41.1	14.4	5.2	61.2	1.3	14.8	3.1	0.11	2.50	0.52					11,130		
					3			40.2	44.3	15.5	4.8	65.9	1.4	9.0	3.4	0.12	2.69	0.56					11,990		
					4			47.6	52.4		5.6	78.1	1.7	10.6	4.0	0.14	3.19	0.66					14,200		
		617A1-4	2	3	1	41	2.5	38.6	43.6	15.3					2.8										57
		9*			2*		7.3	36.7	41.5	14.5					2.6								11,110		
					3			39.6	44.8	15.6					2.8								11,980		
					4			46.9	53.1						3.6								14,200		
		617B	4	3	2*	34	7.1	34.6	39.6	18.7	5.7	57.2	1.1	14.3	3.0	0.07	2.53	0.43					10,390	57
		X			3			37.2	42.7	20.1	5.3	61.6	1.2	8.5	3.3	0.08	2.72	0.46					11,180	
					4			46.6	53.4		6.6	77.2	1.5	10.6	4.1	0.09	3.41	0.58					14,000	
Hamilton		632A1	2	3	2*	34	9.9	37.3	47.9	4.9					0.9								12,200		60
		1			3			41.4	53.2	5.4					1.0								13,540		
					4			43.8	56.2						1.0								14,310		
		632A2	2	3	2*	14	8.7	39.0	46.5	5.8					2.8								12,190		60
		2			3			42.7	50.9	6.4					3.1								13,350		
					4			45.6	54.4						3.3								14,260		
		632A1,2	2	3	2*	48	9.5	37.8	47.5	5.2					1.4								12,200		60
		9*			3			41.8	52.5	5.7					1.6								13,480		
					4			44.3	55.7						1.6								14,300		
		632B	2	3	2*	42	9.2	36.3	45.4	9.1					2.5								11,620		60
		X			3			40.0	50.0	10.0					2.7								12,800		
					4			44.4	55.6						3.0								14,220		

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LAWRENCE COUNTY (continued)																								
Hamilton (continued)	Lower Kittanning (No. 5) (continued)	634	2	3	2*	30	6.2	39.9	45.8	8.1	5.5	67.7	1.5	14.6	2.6								12,315	61
		X			3			42.6	48.8	8.6	5.2	72.2	1.5	9.8	2.7								13,130	
					4			46.6	53.4		5.6	79.0	1.7	10.7	3.0								14,370	
Washington		633A1	2	3	2	22	9.1	36.6	48.7	5.6					0.8									60
		1			3			40.2	53.5	6.3					0.9									
					4			42.9	57.1						0.9									
		633A2	2	3	2	7	8.6	35.8	46.2	9.4					1.6									60
		2			3			39.2	50.5	10.3					1.8									
					4			43.7	56.3						2.0									
		633A1,2	2	3	2	29	8.7	36.8	47.8	6.7					1.2									60
		9			3			40.3	52.3	7.4					1.3									
					4			43.5	56.5						1.4									
		633A1,2	2	3	2	29	9.0	36.4	48.1	6.5					1.0									60
		9*			3			40.0	52.9	7.1					1.1									
					4			43.1	56.9						1.2									
		633B1	2	3	2	22	9.3	36.8	46.2	7.7					0.8									60
		1			3			40.6	50.9	8.5					0.9									
					4			44.3	55.7						1.0									
		633B2	2	3	2	7	8.6	35.4	44.2	11.8					2.4									60
		2			3			38.7	48.3	13.0					2.7									
					4			44.5	55.5						3.1									
		633B1,2	2	3	2	29	9.2	36.1	45.9	8.8					1.3									60
		9			3			39.8	50.5	9.7					1.5									
					4			44.1	55.9						1.6									
		633B1,2	2	3	2	29	9.1	36.5	45.7	8.7					1.2									60
		9*			3			40.1	50.3	9.6					1.3									
					4			44.4	55.6						1.4									
		645	2	3	2	26	7.8	35.7	45.8	10.7					1.1								11,520	60
		X			3			38.7	49.7	11.6					1.2								12,500	
					4			43.8	56.2						1.4								14,140	
		646A1	2	3	2	16	8.7			5.6					0.8								12,180	63
		1			3					6.1					0.9								13,350	
					4										1.1								14,220	
		646A2	2	3	2	5	8.1			9.3					2.4								11,574	63
		2			3					10.1					2.6								12,600	
					4										2.9								14,020	
		646A1,2	2	3	2	21	8.6			6.4					1.2								12,040	63
		9*			3					7.0					1.3								13,170	
					4										1.4								14,170	

MAHONING COUNTY																									
Beaver	Lower Kittanning (No. 5)	622-1	2	3	2*	26	5.4	36.7	55.1	2.8	5.6	76.5	1.4	12.6	1.1	0.02	0.61	0.52					13,590	57
		1			3			38.8	58.2	3.0	5.3	80.8	1.5	8.2	1.2	0.02	0.65	0.55					14,370	
					4			40.0	60.0		5.4	83.3	1.5	8.5	1.3	0.02	0.67	0.57					14,810	
		622-2	2	3	2*	6	3.1	35.7	41.3	19.9	4.9	63.8	1.2	9.3	0.9	0.02	0.51	0.40					11,430	57
		2			3			36.9	42.6	20.5	4.7	65.8	1.2	6.8	1.0	0.02	0.53	0.41					11,800	
					4			46.4	53.6		5.9	82.8	1.6	8.5	1.2	0.03	0.66	0.52					14,840	
		622-1,2	2	3	2*	32	5.0	36.5	52.7	5.8	5.5	74.2	1.4	12.0	1.1	0.02	0.59	0.49					13,220	57
		9*			3			38.4	55.5	6.1	5.2	78.1	1.4	8.0	1.2	0.02	0.62	0.52					13,920	
					4			40.9	59.1		5.5	83.2	1.5	8.6	1.2	0.02	0.66	0.56					14,820	
		635	2	3	2*	30	5.2	37.4	54.3	3.1	5.5	77.3	1.6	11.5	1.0								13,590	61
		X			3			39.5	57.2	3.3	5.2	81.5	1.7	7.3	1.0								14,340	
					4			40.8	59.2		5.4	84.3	1.7	7.5	1.1								14,820	
Smith		611A1	2	3	2	19	4.4	39.8	46.2	9.6					3.1	0.02	1.84	1.21					12,610	55
		1			3			41.6	48.4	10.0					3.2	0.02	1.92	1.27					13,190	
					4			46.3	53.7						3.6	0.02	2.13	1.41					14,660	
		611A2	2	3	2	5	4.4	23.5	26.5	45.6					2.0	0.02	1.38	0.62					6,980	55
		2			3			24.6	27.7	47.7					2.1	0.02	1.44	0.65					7,300	
					4			47.0	53.0						4.0	0.04	2.75	1.25					13,960	
		611A3	2	3	2	15	4.4	41.4	47.2	7.0					3.5	0.03	2.37	1.12					12,980	55
		3			3			43.3	49.4	7.3					3.7	0.03	2.48	1.17					13,580	
					4			46.7	53.3						4.0	0.03	2.67	1.27					14,650	
		611A1-3	2	3	2	39	4.4	38.3	44.1	13.2					3.1	0.02	1.97	1.11					12,030	55
		9*			3			40.1	46.1	13.8					3.2	0.02	2.06	1.16					12,580	
					4			46.5	53.5						3.8	0.02	2.40	1.34					14,600	
		611B1	2	3	2	20	4.4	40.0	46.6	9.0					4.2	0.03	2.97	1.17					12,670	55
		1			3			41.8	48.8	9.4					4.4	0.03	3.11	1.22					13,250	
					4			46.2	53.8						4.8	0.03	3.43	1.35					14,630	
		611B2	2	3	2	5	4.4	27.2	30.5	37.9					2.3	0.03	1.72	0.56					8,200	55
		2			3			28.5	31.9	39.6					2.4	0.03	1.80	0.59					8,580	
					4			47.2	52.8						4.0	0.05	2.98	0.97					14,110	
		611B3	2	3	2	16	4.4	40.3	47.7	7.6					4.0	0.05	2.82	1.11					12,900	55
		3			3			42.2	49.9	7.9					4.2	0.05	2.96	1.16					13,490	
					4			45.8	54.2						4.5	0.06	3.21	1.25					14,660	
		611B1-3	2	3	2	41	4.4	37.7	44.0	13.9					3.8	0.04	2.70	1.02					11,910	55
		9*			3			39.4	46.1	14.5					3.9	0.04	2.82	1.07					12,460	
					4			46.1	53.9						4.6	0.05	3.29	1.25					14,570	
		611C1	2	3	2	18	4.4	39.6	48.2	7.8					3.2	0.03	2.14	1.01					12,820	55
		1			3			41.4	50.4	8.2					3.3	0.03	2.24	1.06					13,410	
					4			45.1	54.9						3.6	0.03	2.44	1.16					14,600	
		611C2	2	3	2	6	4.4	26.8	30.4	38.4					1.7	0.02	1.02	0.65					8,140	55
		2			3			28.0	31.8	40.2					1.8	0.02	1.07	0.68					8,510	
					4			46.8	53.2						3.0	0.03	1.80	1.14					14,230	
		611C3	2	3	2	15	4.4	41.1	46.8	7.7					3.6	0.03	2.59	0.95					12,880	55
		3			3			43.0	49.0	8.0					3.7	0.03	2.71	0.99					13,470	
					4			46.7	53.3						4.0	0.03	2.94	1.08					14,650	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MAHONING COUNTY (continued)																								
Smith (continued)	Lower Kittanning (No. 5) (continued)	611C1-3	2	3	2	39	4.4	37.9	44.5	13.2					3.1	0.03	2.10	0.93					12,010	55
		9*			3			39.6	46.6	13.8					3.2	0.03	2.20	0.97					12,560	
					4			46.0	54.0						3.7	0.04	2.55	1.12					14,570	
MEIGS COUNTY																								
Chester	Redstone (No. 8A)	710	3	3	1	40	4.4	43.0	43.7	8.9	4.8	68.5	1.1	13.3	3.4	0.13	2.32	0.94	2080	2170	2380		12,290	70
		X			3			45.0	45.7	9.3	5.0	71.7	1.2	9.3	3.5	0.14	2.43	0.98					12,870	
					4			49.6	50.4		5.5	79.0	1.3	10.3	3.9	0.14	3.67	1.09					14,180	
Columbia	Clarion (No. 4A)	804A	1	1	2	20	3.6	40.8	44.3	11.3	5.2	66.4	1.1	13.0	3.0	0.11	1.20	1.71	2100	2180	2350	3½	12,050	76
		1			3			42.4	45.9	11.7	5.0	68.9	1.2	10.1	3.1	0.11	1.24	1.78					12,500	
					4			48.0	52.0		5.7	78.1	1.3	11.3	3.6	0.13	1.41	2.02					14,160	
		804B	1	1	2	6	6.7	10.1	6.0	77.2	2.0	9.3	0.3	10.0	1.2	0.45	0.56	0.21	2500	2660	2800+	0	1,570	76
		2			3			10.8	6.5	82.7	1.3	9.9	0.3	4.5	1.3	0.48	0.60	0.23					1,680	
					4			62.7	37.3		7.8	57.8	1.8	25.1	7.5	2.79	3.46	1.30					9,750	
		804C	1	1	2	14	3.4	37.7	47.3	11.6	5.3	66.3	1.0	12.6	3.2	0.15	1.49	1.61	2000	2100	2275	1½	12,010	76
		3			3			39.0	49.0	12.0	5.1	68.7	1.1	9.7	3.4	0.16	1.54	1.66					12,430	
					4			44.3	55.7		5.8	78.1	1.2	11.1	3.8	0.18	1.75	1.89					14,130	
		804D	1	1	2	17	3.8	33.7	41.1	21.4	4.8	57.7	0.9	11.7	3.5	0.25	2.13	1.15	2410	2535	2640	1	10,320	76
		4			3			35.1	42.6	22.3	4.6	60.0	1.0	8.4	3.7	0.26	2.21	1.19					10,730	
					4			45.1	54.9		5.9	77.3	1.3	10.8	4.7	0.33	2.85	1.57					13,800	
		804A,C,D	1	1	2	51	3.6	37.6	44.0	14.8	5.1	63.5	1.0	12.4	3.2	0.16	1.59	1.48	2180	2280	2430		11,460	76
		9*			3			39.0	45.6	15.4	4.9	65.9	1.1	9.4	3.3	0.17	1.64	1.54					11,890	
					4			46.0	54.0		5.8	77.8	1.3	11.1	4.0	0.21	1.98	1.83					14,040	
		804A-D	1	1	2	57	3.9	34.7	40.0	21.4	4.8	57.7	0.9	12.2	3.0	0.19	1.48	1.35	2210	2320	2460		10,410	76
		9*			3			36.1	41.6	22.3	4.6	60.0	0.9	9.1	3.1	0.20	1.52	1.40					10,830	
					4			47.8	52.2		5.8	77.2	1.2	11.7	4.1	0.25	1.98	1.82					13,930	
		805	1	1	2	61	4.2	34.9	43.8	17.1	5.2	61.1	0.9	12.7	3.0	0.16	1.09	1.73	2110	2230	2310	1	11,090	76
		X			3			36.4	45.7	17.9	4.9	63.7	0.9	9.5	3.1	0.17	1.14	1.80					11,570	
					4			44.4	55.6		6.0	77.6	1.1	11.5	3.8	0.20	1.38	2.20					14,090	
Lebanon	Bedford	712	3	3	1	34	2.6	37.7	48.7	11.0					4.2	0.12	3.33	0.75					12,300	70
		X			3			38.7	50.0	11.3					4.3	0.12	3.42	0.77					12,630	
					4			43.6	56.4						4.9	0.13	3.87	0.86					14,250	
	Redstone (No. 8A)	711	3	3	1	42	4.0	42.7	44.3	9.0	4.6	69.5	1.1	12.6	3.2	0.11	2.35	0.73	2140	2300	2490		12,280	70
		X			3			44.5	46.1	9.4	4.9	72.7	1.2	8.5	3.3	0.11	2.45	0.76					12,790	
					4			49.1	50.9		5.4	80.2	1.3	9.5	3.6	0.12	2.71	0.83					14,110	
Salem	Clarion (No. 4A)	806A	1	1	2	23	2.9	37.7	38.4	21.0	4.8	58.6	0.9	8.6	6.1	0.03	4.40	1.67	1845	1945	1995	1	10,680	76
		1			3			38.8	39.6	21.6	4.6	60.4	0.9	6.2	6.3	0.03	4.54	1.72					11,000	
					4			49.5	50.5		5.9	77.0	1.2	7.9	8.0	0.04	5.79	2.19					14,030	

		806B	1	1	2	5	3.8	12.7	8.5	75.0	1.9	12.7	0.2	9.2	1.0	0.24	0.65	0.14	2775	2800+		0	2,030	76
		2			3			13.2	8.8	78.0	1.5	13.2	0.3	5.9	1.1	0.26	0.67	0.14					2,110	
					4			59.9	40.1		6.9	59.9	0.9	27.5	4.8	1.13	3.06	0.66					9,575	
		806C	1	1	2	11	3.0	41.7	42.8	12.5	5.3	65.3	0.8	10.6	5.5	0.23	3.50	1.75	2130	2180	2280	3	11,990	76
		3			3			42.9	44.2	12.9	5.1	67.4	0.8	8.2	5.6	0.24	3.60	1.80					12,350	
					4			49.3	50.7		5.9	77.3	0.9	9.4	6.5	0.27	4.13	2.07					14,170	
		806D	1	1	2	15	3.2	34.4	37.9	24.5	4.4	52.9	0.9	9.4	7.9	0.02	5.99	1.86	2080	2130	2190	1	9,770	76
		4			3			35.5	39.2	25.3	4.2	54.6	0.9	6.9	8.1	0.02	6.19	1.93					10,090	
					4			47.5	52.5		5.7	73.2	1.2	9.0	10.9	0.03	8.29	2.57					13,520	
		806A,C,D	1	1	2	49	3.0	37.6	39.2	20.2	4.8	58.3	0.9	9.3	6.5	0.07	4.68	1.74	1980	2050	2120		10,690	76
		9*			3			38.8	40.4	20.8	4.6	60.2	0.9	6.8	6.7	0.07	4.83	1.79					11,020	
					4			48.9	51.1		5.8	75.9	1.2	8.6	8.5	0.08	6.18	2.26					13,920	
		806A-D	1	1	2	54	3.1	35.3	36.4	25.2	4.5	54.2	0.8	9.3	6.0	0.08	4.31	1.59	2050	2120	2180		9,890	76
		9*			3			36.4	37.6	26.0	4.3	55.9	0.8	6.8	6.2	0.09	4.44	1.64					10,200	
					4			49.2	50.8		5.8	75.6	1.1	9.1	8.4	0.11	6.01	2.25					13,790	
MONROE COUNTY																									
Adams	Pittsburgh (No. 8)	664	3	4	2	45	2.6	40.8	44.6	12.0					6.2				1936	2080	2313	6½	12,510	56
		X			3			41.9	45.8	12.3					6.4								12,850	
					4			47.8	52.2						7.2								14,650	
		664A	3	4	2	F	1.9	43.5	46.4	8.2					4.6				1948	2130	2625		13,200	56
		X			3			44.3	47.3	8.4					4.7								13,450	
					4			48.4	51.6						5.2								14,680	
		665	3	4	2	50	1.6	42.4	45.7	10.3					5.6				2090	2140	2495	6	12,800	56
		X			3			43.0	46.5	10.5					5.7								13,010	
					4			48.1	51.9						6.4								14,540	
		665A	3	4	2	F	2.6	42.8	47.0	7.6					4.5				2090	2170	2653	6	13,210	56
		X			3			44.0	48.2	7.8					4.7								13,550	
					4			47.7	52.3						5.0								14,710	
Franklin	Brookville (No. 4)	703	3	3	1	36	1.5	40.2	46.2	12.1	4.9	70.7	1.1	7.2	4.0	0.06	2.76	1.13	2080	2150	2340		12,970	70
		X			3			40.8	46.9	12.3	5.0	71.8	1.1	5.8	4.0	0.06	2.80	1.15					13,160	
					4			46.5	53.5		5.7	81.8	1.3	6.6	4.6	0.06	3.21	1.30					15,000	
	Lower Kittanning (No. 5)	702	3	3	1	36	1.5	38.1	45.5	14.9	4.7	67.5	1.0	6.1	5.8	0.06	4.52	1.20	2190	2280	2320		12,390	70
		X			3			38.7	46.2	15.1	4.7	68.5	1.1	4.7	5.9	0.06	4.59	1.22					12,570	
					4			45.6	54.4		5.6	80.6	1.3	5.6	6.9	0.07	5.41	1.43					14,810	
	Middle Kittanning (No. 6)	701	3	3	1	52	1.9	38.2	49.8	10.1	4.9	72.7	1.4	7.7	3.2	0.07	2.64	0.52	2040	2140	2320		13,160	70
		X			3			39.0	50.7	10.3	5.0	74.1	1.4	5.9	3.3	0.07	2.69	0.53					13,420	
					4			43.5	56.5		5.6	82.6	1.6	6.5	3.7	0.07	2.99	0.61					14,950	
Jackson	Lower Kittanning (No. 5)	698	3	3	1	47	1.2	38.9	50.6	9.3	5.1	74.3	1.3	6.9	3.1	0.01	2.33	0.79	2200	2280	2440		13,460	70
		X			3			39.4	51.2	9.4	5.1	75.2	1.4	5.7	3.2	0.01	2.36	0.80					13,620	
					4			43.5	56.5		5.7	83.0	1.5	6.3	3.5	0.01	2.60	0.88					15,030	
	Pittsburgh (No. 8)	688	3	3	1	38	1.0	42.0	46.2	10.8					6.6	0.01	4.74	1.86					13,000	70
		X			3			42.4	46.7	10.9					6.7	0.01	4.79	1.88					13,140	
					4			47.6	52.4						7.5	0.01	5.37	2.11					14,740	
Malaga	Middle Kittanning (No. 6)	700	3	3	1	47	1.6	39.0	48.5	10.9	5.0	72.0	1.4	7.2	3.5	0.02	2.92	0.60	2070	2180	2340		13,150	70
		X			3			39.6	49.3	11.1	5.0	73.2	1.4	5.7	3.6	0.02	2.97	0.61					13,360	
					4			44.6	55.4		5.7	82.3	1.6	6.4	4.0	0.02	3.34	0.69					15,030	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MONROE COUNTY (continued)																								
Malaga (continued)	Pittsburgh (No. 8)	699	3	3	1	50	1.7	41.2	47.3	9.8	4.9	71.3	1.2	8.0	4.8	0.03	2.94	1.84	2060	2200	2400		13,020	70
		X			3			41.9	48.1	10.0	5.0	72.6	1.2	6.3	4.9	0.03	2.99	1.87					13,250	
					4			46.6	53.4		5.7	80.6	1.3	7.0	5.4	0.03	3.32	2.08					14,720	
	Meigs Creek (No. 9)	690	3	3	1	26	1.5	37.9	42.8	17.8					5.4	0.01	3.52	1.87					11,760	70
		X			3			38.4	43.5	18.1					5.5	0.01	3.57	1.90					11,940	
					4			46.9	53.1						6.7	0.01	4.36	2.32					14,510	
Ohio	Pittsburgh (No. 8)	660	3	4	2	40	3.1	40.5	46.0	10.4					4.6				1995	2083	2404	7½	12,850	58
		X			3			41.8	47.4	10.8					4.7								13,250	
					4			46.8	53.2						5.3								14,850	
Perry	Bedford	689	3	3	1	37	0.9	37.1	41.3	20.7					6.8	0.03	5.58	1.15					11,570	70
		X			3			37.4	41.7	20.9					6.8	0.03	5.63	1.16					11,670	
					4			47.3	52.7						8.6	0.03	7.13	1.46					14,760	
Salem	Pittsburgh (No. 8)	652	3	4	2	57	2.5	40.4	46.7	10.4					4.9				1900	2070	2385	7½	12,790	55
		X			3			41.4	47.9	10.7					5.0								13,130	
					4			46.4	53.6						5.6								14,690	
		652A	3	4	2	F	1.9	41.6	48.6	7.9					4.4				1960	2120	2525		13,200	55
		X			3			42.4	49.5	8.1					4.5								13,450	
					4			46.1	53.9						4.9								14,630	
		653	3	4	2	46	3.1	38.8	47.5	10.6					4.7				1925	2030	2435	7½	12,730	56
		X			3			40.1	49.0	10.9					4.8								13,140	
					4			45.0	55.0						5.4								14,750	
		654	3	4	2	54	2.7	37.8	49.2	10.3					5.2				1915	2045	2465	7	12,840	56
		X			3			38.8	50.6	10.6					5.4								13,200	
					4			43.4	56.6						6.0								14,760	
		655	3	4	2	60	3.6	38.5	45.5	12.4					5.4				1935	2120	2480	7	12,370	56
		X			3			39.9	47.2	12.9					5.6								12,830	
					4			45.8	54.2						6.4								14,710	
		658	3	4	2	56	2.8	39.8	48.6	8.8					4.1				1971	2085	2405	6½	13,110	58
		X			3			40.9	50.0	9.1					4.2								13,480	
					4			45.0	55.0						4.6								14,830	
		659	3	4	2	51	2.8	38.5	48.0	10.7					5.4				1959	2017	2273	7½	12,710	58
		X			3			39.6	49.4	11.0					5.6								13,080	
					4			44.5	55.5						6.2								14,700	
		662	3	4	2	61	2.6	42.5	46.2	8.7					4.5				2000	2040	2470		13,040	55
		X			3			43.6	47.5	8.9					4.7								13,390	
					4			47.9	52.1						5.1								14,710	
		662A	3	4	2	61	2.5	40.6	48.1	8.8					4.4				1993	2080	2367	7	13,100	55
		X			3			41.7	49.3	9.0					4.5								13,440	
					4			45.8	54.2						5.0								14,780	

		733	1	1	1	31	1.8	39.3	45.7	13.2	4.9	68.9	1.2	7.8	4.0				2040	2090	2140	7	12,470	76
		X			2		2.0	39.2	45.7	13.1	5.0	68.7	1.2	8.0	4.0	0.18	2.96	0.88					12,440	
					3			40.0	46.6	13.4	4.8	70.1	1.2	6.4	4.1	0.18	3.02	0.90					12,700	
					4			46.2	53.8		5.6	80.9	1.4	7.4	4.7	0.21	3.49	1.03					14,660	
		734	1	1	1	38	1.2	39.4	47.5	11.9	5.0	69.8	1.2	7.9	4.2				2040	2090	2140	7	12,650	76
		X			2		1.7	39.2	47.3	11.8	5.1	69.4	1.2	8.3	4.2	0.15	3.40	0.64					12,580	
					3			39.9	48.1	12.0	5.0	70.6	1.2	6.9	4.3	0.15	3.46	0.65					12,800	
					4			45.3	54.7		5.6	80.3	1.3	8.0	4.8	0.17	3.93	0.74					14,550	
Sunsbury		650	3	4	2	50	2.5	40.5	45.4	11.6					5.3				1971	2070	2289	6	12,560	55
		X			3			41.5	46.6	11.9					5.4								12,880	
					4			47.1	52.9						6.2								14,610	
		651	3	4	2	62	2.8	40.6	45.7	10.9					5.8				1961	2029	2235	7	12,630	55
		X			3			41.8	47.0	11.2					6.0								13,000	
					4			47.0	53.0						6.1								14,630	
Switzerland		648	3	4	2	59	2.8	41.7	46.7	8.8					4.3				2015	2130	2369	6	12,970	55
		X			3			42.9	48.1	9.0					4.4								13,350	
					4			47.1	52.9						4.8								14,670	
		648A	3	4	2	59	2.5	42.0	46.4	9.1					4.3				2000	2100	2450		13,040	55
		X			3			43.1	47.6	9.3					4.4								13,370	
					4			47.5	52.5						4.9								14,740	
		649	3	4	2	44	2.5	40.7	45.9	10.9					5.0				1973	2040	2195	6	12,690	55
		X			3			41.7	47.1	11.2					5.1								13,020	
					4			47.0	53.0						5.7								14,650	
		663	3	4	2	54	3.1	40.2	47.3	9.4					4.5				1960	2140	2313	7	12,860	55
		X			3			41.5	48.8	9.7					4.7								13,270	
					4			46.0	54.0						5.2								14,700	
		726	1	1	1	61	1.7	41.2	46.5	10.6	5.1	70.8	1.2	7.8	4.5				1980	2030	2080	5	12,800	76
		X			2		2.0	41.1	46.4	10.5	5.1	70.6	1.2	8.1	4.5	0.10	2.90	1.47					12,760	
					3			41.9	47.4	10.7	5.0	72.0	1.2	6.5	4.6	0.10	2.96	1.50					13,020	
					4			46.9	53.1		5.6	80.7	1.4	7.2	5.1	0.11	3.32	1.68					14,590	
		727	1	1	1	61	1.6	41.9	46.9	9.6	5.3	71.4	1.2	7.9	4.6				2000	2050	2100	6½	12,930	76
		X			2		2.0	41.7	46.7	9.6	5.3	71.1	1.2	8.2	4.6	0.07	2.87	1.66					12,880	
					3			42.6	47.6	9.8	5.2	72.6	1.2	6.5	4.7	0.07	2.93	1.70					13,150	
					4			47.2	52.8		5.8	80.4	1.3	7.3	5.2	0.08	3.25	1.88					14,570	
		731	1	1	1	56	1.7	43.3	46.2	8.8	5.3	72.7	1.3	8.3	3.6				2040	2090	2190	7½	13,120	76
		X			2		2.0	43.2	46.0	8.8	5.3	72.5	1.3	8.5	3.6	0.13	2.08	1.41					13,090	
					3			44.1	46.9	9.0	5.2	74.0	1.3	6.8	3.7	0.13	2.13	1.43					13,350	
					4			48.4	51.6		5.7	81.2	1.4	7.6	4.1	0.15	2.34	1.58					14,660	
		732	1	1	1	55	1.7	41.0	46.2	11.1	5.3	70.3	1.2	7.2	4.9				2040	2090	2200	7	12,750	76
		X			2		2.0	40.9	46.1	11.0	5.3	70.1	1.2	7.5	4.9	0.21	3.43	1.24					12,710	
					3			41.7	47.0	11.3	5.2	71.5	1.3	5.7	5.0	0.21	3.50	1.26					12,970	
					4			47.0	53.0		5.8	80.6	1.4	6.6	5.6	0.24	3.94	1.42					14,620	
MORGAN COUNTY																									
Bristol	Brookville (No. 4)	695	3	3	1	33	2.3	38.1	50.9	8.7					2.3	0.01	1.77	0.54					13,130	70
		X			3			39.0	52.1	8.9					2.4	0.01	1.81	0.56					13,440	
					4			42.8	57.2						2.6	0.01	1.99	0.60					14,750	
Center	Middle Kittanning (No. 6)	694	3	3	1	32	1.5	44.3	44.7	9.5					5.2	0.01	4.42	0.80					13,130	70
		X			3			44.9	45.4	9.7					5.3	0.01	4.49	0.81					13,330	
					4			49.7	50.3						5.9	0.01	4.97	0.89					14,750	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MUSKINGUM COUNTY																							
Adams	Middle Kittanning (No. 6)	743A	1	1	2	25	5.1	45.8	45.9	3.2	5.8	73.5	1.4	13.2	2.9	0.07	1.25	1.59	1950	2000	2110	4	13,320	76
		1			3			48.2	48.5	3.3	5.5	77.4	1.5	9.2	3.1	0.07	1.32	1.67					14,040	
					4			49.9	50.1		5.7	80.0	1.5	9.6	3.2	0.08	1.36	1.73					14,520	
		743B	1	1	2	12	4.4	42.9	41.3	11.4	5.1	62.4	1.2	10.9	9.0	1.03	5.24	2.72	2150	2200	2250	3½	11,730	76
		2			3			44.9	43.2	11.9	4.8	65.3	1.3	7.3	9.4	1.08	5.49	2.85					12,260	
					4			51.0	49.0		5.5	74.1	1.4	8.3	10.7	1.23	6.23	3.23					13,920	
		743A,B	1	1	2	37	4.9	44.8	44.4	5.9	5.6	69.9	1.3	12.4	4.9	0.38	2.55	1.95	2010	2060	2160		12,800	76
		9*			3			47.1	46.8	6.1	5.3	73.4	1.4	8.6	5.2	0.40	2.68	2.08					13,460	
					4			50.3	49.7		5.6	78.1	1.5	9.2	5.6	0.45	2.95	2.22					14,320	
		743C	1	1	2	6	5.2	19.2	17.4	58.2	2.9	26.8	0.5	11.0	0.6	0.03	0.14	0.43	2730	2790	2890	0	4,490	76
		3			3			20.2	18.5	61.3	2.4	28.3	0.6	6.8	0.6	0.03	0.15	0.45					4,730	
					4			52.5	47.5		6.4	73.2	1.4	17.4	1.6	0.08	0.38	1.17					12,270	
		743D	1	1	2	4	5.0	32.8	40.0	22.2	4.5	58.0	1.1	12.2	2.0	0.11	1.16	0.72	2130	2180	2240	1	10,200	76
		4			3			34.6	42.1	23.3	4.1	61.1	1.1	8.3	2.1	0.11	1.22	0.76					10,730	
					4			45.1	54.9		5.4	79.6	1.5	10.8	2.7	0.15	1.59	0.99					14,000	
		743A-D	1	1	2	47	4.9	40.6	40.6	13.9	5.1	63.4	1.2	12.3	4.1	0.31	2.13	1.66	2120	2170	2260		11,520	76
		9*			3			42.7	42.7	14.6	4.8	66.7	1.3	8.3	4.3	0.32	2.24	1.74					12,110	
					4			50.0	50.0		5.6	78.1	1.5	9.8	5.0	0.38	2.62	2.04					14,190	
Hopewell	Clarion (No. 4A)	623A1	3	3	2	24	11.3	36.0	40.5	12.2					3.5	0.31	1.54	1.61					10,730	58
		1			3			40.6	45.7	13.7					3.9	0.35	1.74	1.81					12,100	
					4			47.0	53.0						4.5	0.41	2.02	2.09					14,010	
		623A2	3	3	2	8	11.3	31.9	36.5	20.3					9.1	3.29	5.42	0.44					7,950	58
		2			3			36.0	41.1	22.9					10.3	3.71	6.11	0.50					8,960	
					4			46.7	53.3						13.4	4.81	7.92	0.66					11,620	
		623A3	3	3	2	22	11.3	35.7	46.2	6.8					1.5	0.05	0.12	1.37					11,340	58
		3			3			40.2	52.1	7.7					1.7	0.06	0.12	1.56					12,790	
					4			43.6	56.4	.					1.9	0.07	0.15	1.67					13,850	
		623A4	3	3	2	25	11.3	34.9	46.3	7.5					1.9	0.16	0.41	1.35					10,690	58
		4			3			39.4	52.2	8.4					2.2	0.18	0.46	1.52					12,050	
					4			43.1	56.9						2.4	0.20	0.50	1.66					13,160	
		623A5	3	3	2	8	11.2	18.1	11.6	59.1					0.4	0.03	0.00	0.38					2,980	58
		5			3			20.4	13.1	66.5					0.5	0.03	0.00	0.43					3,360	
					4			60.9	39.1						1.4	0.10	0.00	1.28					10,020	
		623A1-5	3	3	2	87	11.3	35.2	44.4	9.1	5.4	61.3	1.1	20.8	2.3	0.21	0.72	1.39					10,860	58
		9			3			39.7	50.0	10.3	4.7	69.1	1.2	12.1	2.6	0.24	0.81	1.56					12,250	
					4			44.3	55.7		5.2	77.1	1.3	13.5	2.9	0.27	0.90	1.74					13,650	
		623A1-5	3	3	2	87	11.3	33.5	40.5	14.7					2.7	0.42	1.03	1.25					9,880	58
		9*			3			37.8	45.6	16.6					3.0	0.47	1.16	1.41					11,140	
					4			45.3	54.7						3.6	0.56	1.39	1.69					13,351	

		623A1-4	3	3	2	79	11.3	35.2	43.6	9.9					3.0	0.47	1.14	1.34					10,630	58
		9*			3			39.7	49.1	11.2					3.3	0.53	1.28	1.52					11,980	
					4			44.8	55.2						3.9	0.66	1.56	1.69					13,470	
Monroe	Middle Kittanning (No. 6)	744	1	1	2	40	5.3	41.9	42.7	10.1	5.4	67.5	1.3	11.8	3.9	0.34	2.27	1.31	2130	2190	2320	3	12,120	76
		X			3			44.2	45.1	10.7	5.1	71.2	1.3	7.6	4.1	0.35	2.40	1.38					12,790	
					4			49.5	50.5		5.7	79.7	1.5	8.5	4.6	0.40	2.69	1.54					14,320	
Newton	Lower Kittanning (No. 5)	626A1	2	3	2	4	9.1	33.8	41.6	15.5					4.8								10,670	59
		1			3			37.2	45.8	17.0					5.3								11,740	
					4			44.8	55.2						6.4								14,150	
		626A2	2	3	2	38	9.1	38.8	46.1	6.0					2.3								12,070	59
		2			3			42.7	50.7	6.6					2.5								13,280	
					4			45.7	54.3						2.7								14,220	
		626A3	2	3	2	8	9.1	35.9	47.5	7.5					3.1								11,830	59
		3			3			39.5	52.2	8.3					3.4								13,010	
					4			43.1	56.9						3.7								14,180	
		626A1-3	2	3	2	50	9.1	37.4	45.9	7.6					2.5	0.31	1.37	0.81					11,840	59
		9			3			41.1	50.5	8.4					2.7	0.34	1.51	0.89					13,020	
					4			44.9	55.1						3.0	0.37	1.65	0.97					14,210	
		626A1-3	2	3	2	50	9.1	37.9	45.7	7.3					2.7								11,880	59
		9*			3			41.7	50.3	8.0					3.0								13,070	
					4			45.3	54.7						3.2								14,210	
		626B1	2	3	2	7	11.8	36.7	44.8	6.7					2.5								11,480	59
		1			3			41.6	50.8	7.6					2.8								13,020	
					4			45.0	55.0						3.0								14,090	
		626B2	2	3	2	35	11.8	35.9	48.1	4.2					0.8								11,540	59
		2			3			40.7	54.5	4.8					0.9								13,080	
					4			42.8	57.2						0.9								13,740	
		626B3	2	3	2	8	11.8	36.0	47.8	4.4					0.9								11,380	59
		3			3			40.8	54.2	5.0					1.0								12,900	
					4			42.9	57.1						1.1								13,580	
		626B1-3	2	3	2	50	11.8	36.2	47.1	4.9					1.2								11,480	59
		9			3			41.1	53.4	5.5					1.4								13,020	
					4			43.5	56.5						1.4								13,780	
		626B1-3	2	3	2	50	11.8	36.1	47.4	4.7					1.1								11,500	59
		9*			3			40.9	53.8	5.3					1.2								13,040	
					4			43.2	56.8						1.3								13,770	
Washington	Middle Kittanning (No. 6)	801A	1	1	2	26	5.0	40.8	50.6	3.6	5.8	73.3	1.1	14.1	2.2	0.19	0.76	1.21	1920	1970	2020	4	13,020	76
		1			3			42.9	53.3	3.8	5.5	77.1	1.1	10.2	2.3	0.20	0.79	1.26					13,700	
					4			44.6	55.4		5.7	80.2	1.2	10.6	2.3	0.21	0.83	1.31					14,250	
		801B	1	1	2	8	4.3	36.3	40.0	19.4	4.7	56.1	1.0	12.9	5.9	0.76	2.36	2.83	1890	2180	2360	2½	10,350	76
		1						37.9	41.9	20.2	4.4	58.7	1.0	9.5	6.2	0.79	2.46	2.95					10,820	
								47.5	52.5		5.5	73.5	1.3	11.9	7.8	0.99	3.09	3.70					13,570	
		801A,B	1	1	2	34	4.8	39.7	48.0	7.5	5.5	69.1	1.1	13.8	3.1	0.33	1.15	1.60	1910	2020	2100		12,360	76
		9*			3			41.7	50.5	7.8	5.2	72.6	1.1	10.0	3.2	0.34	1.20	1.67					12,990	
					4			45.3	54.7		5.7	78.5	1.2	10.9	3.7	0.40	1.38	1.89					14,080	
		802A	1	1	2	17	5.0	42.1	46.5	6.4	5.3	67.7	1.0	14.6	5.0	0.94	2.34	1.69	2320	2370	2440	3½	12,250	76
		1			3			44.3	49.0	6.7	5.0	71.3	1.1	10.7	5.2	0.99	2.46	1.78					12,900	
					4			47.6	52.4		5.4	76.4	1.2	11.4	5.6	1.06	2.64	1.91					13,840	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MUSKINGUM COUNTY (continued)																								
Washington (continued)	Middle Kittanning (No. 6) (continued)	802B	1	1	2	8	5.3	41.4	46.9	6.4	5.7	71.1	1.1	13.7	2.0	0.26	0.46	1.32	2050	2250	2410	3½	12,600	76
		2			3			43.7	49.6	6.7	5.4	75.0	1.2	9.6	2.1	0.27	0.48	1.39					13,300	
					4			46.8	53.2		5.8	80.5	1.3	10.1	2.3	0.29	0.52	1.49					14,260	
		802C	1	1	2	7	4.7	32.8	33.0	29.5	4.2	48.3	0.7	11.9	5.4	0.69	3.43	1.29	2140	2240	2460	1½	8,790	76
		3			3			34.4	34.7	30.9	3.8	50.6	0.8	8.2	5.7	0.72	3.60	1.36					9,210	
					4			49.7	50.3		5.5	73.3	1.1	11.9	8.2	1.04	5.21	1.96					13,340	
		802A-C	1	1	2	32	5.0	39.9	43.7	11.4	5.1	64.4	1.0	13.8	4.3	0.70	2.08	1.50	2210	2310	2440		11,600	76
		9*			3			42.0	46.1	11.9	4.8	67.8	1.1	9.9	4.5	0.74	2.18	1.58					12,210	
					4			47.8	52.2		5.5	76.8	1.2	11.2	5.3	0.85	2.63	1.81					13,840	
	Upper Freeport (No. 7)	666	3	3	2	62	5.1	38.1	44.7	12.1					4.9								11,850	63
		X			3			40.1	47.1	12.8					5.2								12,500	
					4			46.0	54.0						5.9								14,330	
		667	3	3	2	68	5.3	39.9	45.7	9.1					3.9								12,320	63
		X			3			42.1	48.3	9.6					4.1								13,000	
					4			46.6	53.4						4.5								14,380	
		668	3	3	2	48	5.1	40.4	45.5	9.0					4.4								12,350	63
		X			3			42.6	48.0	9.4					4.6								13,020	
					4			47.0	53.0						5.1								14,380	
		669	3	3	2	26	5.5	36.9	42.9	14.7					8.2								11,280	63
		X			3			39.1	45.3	15.6					8.7								11,940	
					4			46.3	53.7						10.3								14,140	
		670	3	3	2	36	5.4	40.0	45.4	9.2					4.9								12,270	63
		X			3			42.3	48.0	9.7					5.2								12,970	
					4			46.8	53.2						5.7								14,370	
NOBLE COUNTY																								
Brookfield	Middle Kittanning (No. 6)	706	3	3	1	43	2.8	40.5	46.3	10.4	4.8	69.0	1.3	10.1	4.4	0.22	2.84	1.31	2160	2270	2410		12,670	70
		X			3			41.6	47.7	10.7	5.0	71.0	1.3	7.5	4.5	0.23	2.92	1.35					13,040	
					4			46.6	53.4		5.6	79.5	1.5	8.4	5.0	0.25	3.27	1.52					14,600	
	Lower Freeport (No. 6A)	693	3	3	1	30	1.8	39.8	45.6	12.8					5.3	0.02	4.32	0.92					12,500	70
		X			3			40.5	46.5	13.0					5.4	0.02	4.40	0.94					12,720	
					4			46.6	53.4						6.2	0.02	5.06	1.08					14,630	
Elk	Brookville (No. 4)	773	3	1	2	30	2.2	42.4	46.5	8.9	5.4	71.7	1.4	6.9	5.7	0.13	4.15	1.40	2080	2180	2280	7½	13,260	76
		X			3			43.3	47.6	9.1	5.2	73.3	1.4	5.2	5.8	0.13	4.24	1.43					13,550	
					4			47.6	52.4		5.8	80.6	1.5	5.7	6.4	0.15	4.66	1.57					14,910	
	Lower Kittanning (No. 5)	772	3	1	2	64	2.8	37.6	53.4	6.2	5.4	75.0	1.5	11.0	0.9	0.01	0.41	0.45	2430	2480	2740	5	13,690	76
		X			3			38.7	54.9	6.4	5.3	77.1	1.6	8.7	0.9	0.01	0.42	0.46					14,070	
					4			41.3	58.7		5.6	82.4	1.7	9.3	1.0	0.01	0.45	0.49					15,030	

	Middle Kittanning (No. 6)	771	3	1	2	40	3.0	34.4	48.4	14.2	5.0	68.7	1.3	8.3	2.5	0.10	2.06	0.35	2090	2140	2240	4	12,330	76
		X			3			35.5	49.9	14.6	4.8	70.7	1.3	6.0	2.6	0.10	2.12	0.36					12,700	
					4			41.6	58.4		5.6	82.9	1.5	7.0	3.0	0.12	2.48	0.42					14,880	
		774	3	1	2	47	3.4	36.9	50.1	9.6	5.2	71.6	1.3	8.7	3.6	0.01	3.11	0.51	2080	2130	2180	5½	12,950	76
		X			3			38.2	51.8	10.0	5.0	74.1	1.3	5.8	3.8	0.01	3.22	0.53					13,410	
					4			42.5	57.5		5.6	82.4	1.5	6.3	4.2	0.01	3.58	0.59					14,900	
Jackson	Bedford	692	3	3	1	32	1.4	37.2	50.5	10.9					3.5	0.01	3.03	0.44					12,960	70
		X			3			37.7	51.2	11.1					3.5	0.01	3.07	0.45					13,140	
					4			42.4	57.6						4.0	0.01	3.45	0.50					14,780	
	Lower Kittanning (No. 5)	691	3	3	1	30	1.3	41.5	45.9	11.3					6.1	0.02	5.37	0.68					12,850	70
		X			3			42.0	46.5	11.5					6.1	0.02	5.44	0.69					13,030	
					4			47.4	52.6						6.9	0.02	6.14	0.77					14,710	
	Brookville (No. 4)	705	3	3	1	41	1.9	41.4	45.9	10.8	4.9	70.1	1.3	7.5	5.4	0.16	3.74	1.50	2040	2080	2250		12,930	70
		X			3			42.2	46.8	11.0	5.0	71.4	1.3	5.8	5.5	0.16	3.81	1.53					13,180	
					4			47.4	52.6		5.6	80.2	1.5	6.5	6.2	0.18	4.29	1.71					14,800	
	Middle Kittanning (No. 6)	704	3	3	1	47	1.9	40.7	46.9	10.5	5.0	71.9	1.3	8.2	3.1	0.03	2.67	0.37	2080	2120	2310		13,070	70
		X			3			41.5	47.8	10.7	5.1	73.3	1.4	6.4	3.1	0.03	2.72	0.38					13,320	
					4			46.4	53.6		5.7	82.1	1.5	7.2	3.5	0.03	3.04	0.43					14,910	
PERRY COUNTY																								
Bearfield	Middle Kittanning (No. 6)	783A	1	1	2	13										analysis not received								
		1																						
		783B	1	1	2	9	2.6	34.4	40.3	22.7	4.5	57.9	1.0	11.7	2.2	0.01	1.27	0.92	2630	2680	2880	1½	10,280	76
		2			3			35.3	41.4	23.3	4.4	59.5	1.1	9.4	2.3	0.01	1.30	0.94					10,560	
					4			46.0	54.0		5.7	77.6	1.4	12.4	2.9	0.01	1.70	1.23					13,770	
		783C	1	1	2	28	6.4	39.9	47.0	6.7	5.6	68.0	1.3	16.3	2.1	0.15	1.26	0.67	2080	2130	2190	2	12,190	76
		3			3			42.7	50.1	7.2	5.9	72.7	1.4	10.6	2.2	0.16	1.35	0.72					13,030	
					4			46.0	54.0		5.6	78.3	1.5	12.2	2.4	0.16	1.45	0.78					14,040	
Clayton	Lower Kittanning (No. 5)	615A1	2	3	2	7	7.1	39.9	44.7	8.3					5.2	0.03	3.46	1.71					12,110	56
		1			3			42.9	48.1	9.0					5.6	0.03	3.73	1.83					13,030	
					4			47.1	52.9						6.1	0.03	4.10	2.01					14,320	
		615A2	2	3	2	15	6.0	39.7	41.5	12.8					10.0	0.07	8.48	1.41					11,420	56
		2			3			42.2	44.2	13.6					10.6	0.08	9.02	1.49					12,150	
					4			48.9	51.1						12.2	0.08	10.44	1.73					14,060	
		615A3	2	3	2	12	5.7	39.7	42.6	12.0					5.3	0.04	3.70	1.56					11,740	56
		3			3			42.1	45.2	12.7					5.6	0.04	3.92	1.65					12,460	
					4			48.2	51.8						6.4	0.05	4.49	1.89					14,270	
		615A4	2	3	2	5	5.9	41.5	43.0	9.6					5.6	0.03	4.14	1.42					12,130	56
		4			3			44.1	45.7	10.2					5.9	0.03	4.39	1.50					12,890	
					4			49.1	50.9						6.6	0.03	4.89	1.67					14,350	
		615A1-4	2	3	2	39	6.1	40.0	42.6	11.3					7.1	0.04	5.59	1.50					11,740	56
		9*			3			42.6	45.4	12.0					7.6	0.05	5.96	1.60					12,500	
					4			48.4	51.6						8.7	0.06	6.78	1.82					14,220	
		615A1-4	2	3	2	39	5.7	40.1	42.5	11.7	5.3	62.9	1.2	11.5	7.4	0.11	5.74	1.52					11,728	56
		9			3			42.5	45.1	12.4	5.0	66.7	1.3	6.8	7.8	0.11	6.08	1.61					12,430	
					4			48.5	51.5		5.6	76.3	1.5	7.7	8.9	0.12	6.94	1.84					14,190	
		615B1	2	3	2	4	7.4	36.0	37.4	19.2					4.7	0.03	2.99	1.73					10,308	56
		1			3			38.9	40.4	20.7					5.1	0.03	3.23	1.86					11,130	
					4			49.1	50.9						6.5	0.04	4.07	2.35					14,040	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
PERRY COUNTY (continued)																								
Clayton (continued)	Lower Kittanning (No. 5) (continued)	615B2	2	3	2	15	5.8	41.6	43.1	9.5					8.0	0.05	6.38	1.54					12,052	56
		2			3			44.2	45.7	10.1					8.4	0.05	6.77	1.63					12,790	
					4			49.2	50.8						9.4	0.06	7.53	1.81					14,230	
		615B3	2	3	2	17	5.2	40.9	42.4	11.5					6.3	0.04	4.80	1.45					11,870	56
		3			3			43.2	44.7	12.1					6.6	0.04	5.06	1.52					12,520	
					4			49.1	50.9						7.5	0.05	5.75	1.73					14,240	
		615B4	2	3	2	6	5.1	41.3	41.9	11.7					7.3	0.05	6.01	1.29					11,870	56
		4			3			43.5	44.2	12.3					7.7	0.05	6.33	1.36					12,510	
					4			49.6	50.4						8.8	0.06	7.22	1.55					14,260	
		615B1-4	2	3	2	42	5.6	40.7	42.1	11.6					6.9	0.04	5.35	1.48					11,790	56
		9*			3			43.1	44.6	12.3					7.3	0.04	5.73	1.56					12,510	
					4			49.2	50.8						8.3	0.05	6.52	1.77					14,230	
		615B1-4	2	3	2	42	5.3	40.7	42.5	11.5	5.2	63.8	1.2	11.3	7.0	0.07	5.47	1.47					11,860	56
		9			3			43.0	44.9	12.1	4.9	67.4	1.3	6.9	7.4	0.07	5.79	1.55					12,520	
					4			48.9	51.1		5.5	76.7	1.5	7.9	8.4	0.08	6.59	1.76					14,240	
		615C1	2	3	2	7	7.1	40.4	42.8	9.7					5.3	0.03	4.04	1.24					11,880	56
		1			3			43.5	46.1	10.4					5.7	0.03	4.34	1.33					12,790	
					4			48.5	51.5						6.4	0.03	4.84	1.49					14,270	
		615C2	2	3	2	13	8.2	38.3	43.8	9.7					6.6	0.04	5.49	1.05					11,700	56
		2			3			41.7	47.7	10.6					7.1	0.04	5.97	1.14					12,740	
					4			46.6	53.4						8.0	0.04	6.68	1.28					14,250	
		615C3	2	3	2	17	6.8	40.2	43.3	9.7					4.6	0.03	3.67	0.95					11,940	56
		3			3			43.2	46.4	10.4					5.0	0.03	3.93	1.02					12,810	
					4			48.2	51.8						5.6	0.03	4.39	1.14					14,300	
		615C4	2	3	2	5	5.7	36.4	39.1	18.8					7.7	0.30	6.19	1.20					10,670	56
		4			3			38.6	41.5	19.9					8.1	0.31	6.56	1.28					11,320	
					4			48.2	51.8						10.2	0.39	8.19	1.60					14,130	
		615C1-4	2	3	2	42	7.1	39.2	42.9	10.8					5.7	0.06	4.58	1.05					11,710	56
		9*			3			42.2	46.2	11.6					6.1	0.06	4.92	1.14					12,610	
					4			47.9	52.1						6.9	0.07	5.56	1.29					14,260	
		615C1-4	2	3	2	42	6.7	39.4	43.5	10.4	5.3	64.7	1.2	12.9	5.5	0.05	4.28	1.14					11,810	56
		9			3			42.2	46.6	11.2	4.9	69.3	1.3	7.5	5.8	0.05	4.58	1.22					12,730	
					4			47.5	52.5		5.5	78.0	1.5	8.4	6.6	0.06	5.16	1.37					14,340	
		609	3	3	2*	33	2.4	40.9	44.0	12.7	4.8	62.3	1.3	12.7	6.2	0.57	4.70	0.97					11,617	54
		X			3			41.9	45.1	13.0	4.9	63.8	1.3	10.6	6.4	0.58	4.81	0.99					11,900	
					4			48.2	51.8		5.4	73.4	1.5	12.4	7.3	0.67	5.53	1.14					13,680	
		610	3	3	2*	34	2.6	42.6	42.3	12.5	4.7	59.3	1.2	14.8	7.5	1.45	4.92	1.14					11,230	62
		X			3			43.8	43.4	12.8	4.9	60.8	1.3	12.5	7.7	1.48	5.05	1.17					11,530	
					4			50.2	49.8		5.2	69.9	1.4	14.7	8.8	1.70	5.79	1.34					13,230	

		636	2	3	2	54	6.0	41.8	43.4	8.8					4.2								12,180	62
		X			3			44.5	46.2	9.3					4.5								12,960	
					4			49.0	51.0						5.0								14,290	
Pike		644A	1	3	2	34	7.0	40.7	44.9	7.4					3.6								12,350	63
		1			3			43.8	48.2	8.0					3.8								13,280	
					4			47.5	52.5						4.2								14,430	
		644B	1	3	2	3	5.5	35.2	37.5	21.8					1.8								10,440	63
		2			3			37.2	39.7	23.1					1.9								11,050	
					4			48.4	51.6						2.5								14,360	
		644A,B	1	3	2	37	6.9	40.2	44.3	8.6					3.4								12,190	63
		9*			3			43.2	47.6	9.2					3.6								13,100	
					4			47.6	52.4						4.0								14,420	
	Middle Kittanning (No. 6)	741	1	1	2	56	6.4	33.7	39.0	20.9	4.6	55.4	1.0	12.2	5.9	0.21	4.53	1.21	2080	2130	2180	1	10,040	76
		X			3			36.1	41.6	22.3	4.2	59.2	1.1	6.8	6.4	0.22	4.84	1.30					10,730	
					4			46.4	53.6		5.4	76.2	1.4	8.8	8.2	0.29	6.23	1.67					13,810	
		776A	1	1	2	14	5.8	30.8	35.6	27.8	4.3	51.7	0.9	13.2	2.1	0.21	0.98	0.93	2600	2650	2850	½	9,110	76
		1			3			32.6	38.0	29.4	3.9	54.8	1.0	8.7	2.2	0.22	1.03	0.89					9,650	
					4			46.2	53.8		5.6	77.5	1.4	12.3	3.2	0.31	1.46	1.39					13,660	
		776B	1	1	2	8	6.7	36.0	49.0	8.3	5.4	66.2	1.1	16.5	2.6	0.18	1.29	1.10	2430	2550	2715	1½	11,830	76
		2			3			38.6	52.5	8.9	4.9	71.0	1.2	11.3	2.7	0.19	1.37	1.17					12,680	
					4			42.4	57.6		5.4	77.9	1.3	12.4	3.0	0.21	1.50	1.28					13,920	
		776C	1	1	2	11	4.1	37.6	46.6	11.7	5.0	65.4	1.2	13.5	3.2	0.01	2.09	1.12	2180	2280	2380	1½	11,730	76
		3			3			39.3	48.5	12.2	4.8	68.2	1.3	10.1	3.3	0.01	2.16	1.16					12,240	
					4			44.7	55.3		5.4	77.7	1.4	11.7	3.8	0.01	2.49	1.33					13,930	
		776D	1	1	2	16	6.6	40.2	45.5	7.7	5.3	64.9	1.3	15.3	5.5	0.53	3.14	1.88	2140	2190	2280	2½	11,810	76
		4			3			43.1	48.6	8.3	4.9	69.5	1.4	10.0	5.9	0.57	3.37	2.01					12,650	
					4			46.9	53.1		5.4	75.8	1.5	10.8	6.5	0.62	3.67	2.19					13,790	
		776A-D	1	1	2	49	5.8	36.2	43.4	14.6	4.9	61.4	1.1	14.5	3.5	0.26	1.96	1.30	2330	2400	2540		11,020	76
		9*			3			38.3	46.3	15.4	4.6	65.2	1.2	9.9	3.7	0.27	2.08	1.37					11,690	
					4			45.5	54.5		5.5	77.1	1.4	11.7	4.3	0.32	2.39	1.61					13,800	
Pleasant		777A	1	1	2	10	8.0	30.6	41.6	19.8	4.6	55.6	1.0	15.2	3.8	0.31	2.89	0.59	2060	2110	2160	1½	9,890	76
		1			3			33.3	45.2	21.5	4.0	60.4	1.1	8.9	4.1	0.34	3.14	0.64					10,750	
					4			42.4	57.6		5.1	77.0	1.4	11.3	5.2	0.43	4.00	0.82					13,700	
		777B	1	1	2	18	6.8	32.6	37.3	23.3	4.7	53.2	1.0	15.5	2.3	0.34	0.93	1.00	2530	2630	2840	3½	9,490	76
		2			3			34.9	40.1	25.0	4.3	57.0	1.0	10.3	2.4	0.37	0.99	1.08					10,180	
					4			46.5	53.5		5.7	76.0	1.4	13.6	3.3	0.49	1.32	1.44					13,570	
		777C	1	1	2	7	6.8	38.6	37.5	17.1	5.1	59.5	1.1	14.2	3.0	0.10	2.03	0.88	2460	2520	2620	1½	10,650	76
		3			3			41.4	40.2	18.4	4.7	63.9	1.2	8.6	3.2	0.11	2.17	0.95					11,430	
					4			50.8	49.2		5.7	78.3	1.5	10.5	4.0	0.13	2.67	1.16					14,010	
		777D	1	1	2	22	8.3	42.0	44.0	5.7	5.7	69.3	1.3	15.1	2.9	0.12	2.25	0.52	2020	2120	2220	3½	12,340	76
		4			3			45.7	48.1	6.2	5.2	75.5	1.4	8.6	3.1	0.13	2.45	0.57					13,450	
					4			48.8	51.2		5.5	80.5	1.5	9.1	3.4	0.14	2.62	0.60					14,340	
		777E(A-D)	1	1	2	57	7.2	34.6	42.5	15.7	5.0	60.3	1.1	14.0	3.9	0.17	2.95	0.74	2080	2140	2190	1	10,820	76
		9			3			37.2	45.9	16.9	4.5	65.0	1.2	8.3	4.1	0.18	3.17	0.80					11,650	
					4			44.8	55.2		5.5	78.2	1.5	9.8	5.0	0.22	3.82	0.96					14,030	
		777A-D	1	1	2	57	7.6	36.6	40.7	15.1	5.1	60.7	1.1	15.1	2.9	0.22	1.93	0.72	2240	2320	2450		10,810	76
		9*			3			39.6	44.2	16.2	4.6	65.7	1.2	9.2	3.1	0.23	2.09	0.78					11,710	
					4			47.2	52.8		5.5	78.2	1.5	11.1	3.7	0.29	2.48	0.96					13,950	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
TUSCARAWAS COUNTY																								
Lawrence	Lower Kittanning (No. 5)	621	2	3	2*	36	2.4	40.3	46.3	11.0	5.0	67.6	1.2	9.1	6.1	0.12	4.83	1.21					12,400	57
		X			3			41.3	47.4	11.3	4.8	69.3	1.2	7.1	6.3	0.12	4.95	1.24					12,710	
					4			46.5	53.5		5.5	78.0	1.4	8.0	7.1	0.14	5.57	1.40					14,320	
Sugar Creek		612A1	2	3	2	10	7.3	38.2	45.3	9.2					5.8	0.09	4.08	1.59					11,940	56
		1			3			41.2	48.9	9.9					6.2	0.10	4.40	1.71					12,880	
					4			45.7	54.3						6.9	0.11	4.88	1.90					14,295	
		612A2	2	3	2	12	7.0	41.1	45.6	6.3					5.0	0.14	3.33	1.53					12,470	56
		2			3			44.2	49.0	6.8					5.4	0.15	3.58	1.64					13,410	
					4			47.4	52.6						5.8	0.16	3.84	1.76					14,390	
		612A3a	2	3	2	2	0.5	27.3	22.9	49.3					36.5	0.47	35.73	0.27						56
		3			3			27.4	23.0	49.6					36.6	0.47	35.90	0.27						
					4			54.4	45.6						72.6	0.93	71.17	0.53						
		612A3	2	3	2	11	6.6	37.3	43.1	13.0					4.7	0.03	3.26	1.38					11,530	56
		4			3			39.9	46.2	13.9					5.0	0.03	3.49	1.48					12,350	
					4			46.3	53.7						5.8	0.03	4.05	1.72					14,340	
		612A1-3	2	3	2	33	7.0	39.0	44.7	9.3					5.1	0.09	3.53	1.50					12,000	56
		9*			3			41.9	48.1	10.0					5.5	0.10	3.80	1.61					12,910	
					4			46.6	53.4						6.1	0.11	4.22	1.79					14,340	
		612B1	2	3	2	13	6.6	33.8	40.8	18.8					8.6	0.15	7.02	1.43					10,440	56
		1			3			36.2	43.7	20.1					9.2	0.15	7.51	1.53					11,170	
					4			45.3	54.7						11.5	0.19	9.40	1.91					13,980	
		612B2	2	3	2	15	6.6	40.3	46.3	6.8					5.4	0.05	3.81	1.58					12,420	56
		2			3			43.1	49.6	7.3					5.8	0.05	4.07	1.69					13,300	
					4			46.5	53.5						6.3	0.05	4.39	1.82					14,350	
		612B3	2	3	2	10	6.9	33.4	40.2	19.5					8.3	0.16	7.09	1.08					10,270	56
		3			3			35.9	43.2	20.9					8.9	0.17	7.60	1.17					11,030	
					4			45.4	54.6						11.3	0.21	9.63	1.46					13,950	
		612B1-3	2	3	2	38	6.7	36.3	42.8	14.2					7.3	0.11	5.77	1.39					11,180	56
		9*			3			38.8	45.9	15.3					7.8	0.11	6.17	1.49					11,973	
					4			45.8	54.2						9.4	0.13	7.48	1.75					14,120	
VINTON COUNTY																								
Brown	Brookville (No. 4)	630A1	3	3	2	7	3.0	27.5	36.3	33.2														59
		1			3			28.3	37.5	34.2														
					4			43.0	57.0															
		630A2	3	3	2	17	4.2	34.6	45.7	15.5														59
		2			3			36.1	47.7	16.2														
					4			43.1	56.9															

	630A3	3	3	2	5	3.3	12.1	11.2	73.4														59
	3			3			12.5	11.6	75.9														
				4			51.9	48.1															
	630A4	3	3	2	1	4.2	40.1	45.8	9.9														59
	4			3			41.9	47.8	10.3														
				4			46.7	53.3															
	630A1-4	3	3	2	30	3.8	29.4	37.7	29.1														59
	9*			3			30.6	39.2	30.2														
				4			43.8	56.2															
	630A1,2	3	3	2	24	3.8	32.5	43.0	20.7														59
	9*			3			33.8	44.7	21.5														
				4			43.1	56.9															
	630A1,2	3	3	2	24	3.5	32.5	43.1	20.9	5.3	59.2	1.2	10.7	2.7	0.01	2.08	0.57					10,590	59
	9			3			33.7	44.6	21.7	5.1	61.3	1.2	7.9	2.8	0.01	2.16	0.59					10,970	
				4			43.0	57.0		6.5	78.3	1.5	10.2	3.5	0.01	2.76	0.75					14,010	
Lower Kittanning (No. 5)	629	3	3	2	19	6.5	40.2	40.9	12.4	5.3	62.6	1.3	14.3	4.1	0.05	3.55	0.51					11,540	59
	X			3			43.0	43.7	13.3	4.9	66.9	1.4	9.1	4.4	0.05	3.80	0.55					12,340	
				4			49.6	50.4		5.6	77.2	1.6	10.5	5.1	0.06	4.38	0.63					14,230	
Middle Kittanning (No. 6)	625A1	1	3	2	6	4.7	39.6	45.7	10.0					3.3	0.21	2.47	0.65						58
	1			3			41.6	47.9	10.5					3.5	0.22	2.59	0.68						
				4			46.4	53.6						3.9	0.25	2.89	0.76						
	625A2	1	3	2	1	2.0	11.8	7.5	78.7					0.4	0.15	0.15	0.08						58
	2			3			12.0	7.7	80.3					0.4	0.15	0.15	0.09						
				4			61.1	38.9						2.0	0.78	0.78	0.41						
	625A3	1	3	2	13	4.2	42.1	48.0	5.7					2.3	0.21	1.30	0.77						58
	3			3			43.9	50.1	6.0					2.4	0.22	1.36	0.80						
				4			46.7	53.3						2.5	0.23	1.44	0.86						
	625A4	1	3	2	15	3.8	40.1	41.0	15.1					3.9	0.34	2.77	0.75						58
	4			3			41.7	42.6	15.7					4.0	0.35	2.88	0.78						
				4			49.4	50.6						4.8	0.42	3.42	0.92						
	625A5	1	3	2	5	2.0	14.9	17.5	65.6					3.4	0.56	2.80	0.00						58
	5			3			15.2	17.9	66.9					3.4	0.57	2.86	0.00						
				4			46.0	54.0						10.4	1.73	8.64	0.00						
	625A1-5	1	3	2	40	3.8	36.8	40.2	19.2					3.1	0.30	2.18	0.63						58
	9*			3			38.3	41.8	19.9					3.2	0.31	2.27	0.65						
				4			47.8	52.2						4.0	0.39	2.82	0.81						
	625A1,3,4	1	3	2	34	2.9	42.1	46.8	8.2	5.4	69.7	1.3	12.2	3.2	0.18	2.29	0.71					12,730	58
	9			3			43.4	48.2	8.4	5.2	71.8	1.4	9.9	3.3	0.19	2.36	0.73					13,110	
				4			47.4	52.6		5.7	78.4	1.5	10.8	3.6	0.20	2.58	0.80					14,320	
	625B1	1	3	2	7	4.1	39.8	45.4	10.7					3.5	0.21	3.02	0.31						58
	1			3			41.5	47.3	11.2					3.7	0.22	3.15	0.32						
				4			46.7	53.3						4.1	0.25	3.54	0.36						
	625B2	1	3	2	1	2.1	10.2	2.8	84.9					0.3	0.18	0.03	0.07						58
	2			3			10.4	2.9	86.7					0.3	0.19	0.03	0.07						
				4			78.5	21.5						2.1	1.38	0.23	0.54						
	625B3	1	3	2	12	3.8	46.8	45.3	4.1					2.2	0.10	1.31	0.76						58
	3			3			48.6	47.1	4.3					2.2	0.10	1.36	0.79						
				4			50.8	49.2						2.4	0.11	1.42	0.83						

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
VINTON COUNTY (continued)																								
Brown (continued)	Middle Kittanning (No. 6) (continued)	625B4	1	3	2	12	3.3	41.6	43.6	11.5					4.7	0.28	3.80	0.58						58
		4			3			43.0	45.1	11.9					4.8	0.29	3.93	0.60						
					4			48.8	51.2						5.5	0.33	4.46	0.68						
		625B5	1	3	2	2	2.1	14.1	12.9	70.9					2.5	0.72	1.67	0.10						58
		5			3			14.4	13.2	72.4					2.5	0.74	1.71	0.10						
					4			52.2	47.8						9.2	2.67	6.18	0.37						
		625B1-5	1	3	2	34	3.5	40.1	41.2	15.1					3.3	0.23	2.51	0.54						58
		9*			3			41.5	42.7	15.8					3.4	0.24	2.60	0.56						
					4			49.3	50.7						4.0	0.28	3.08	0.66						
		625B1-5	1	3	2	34	3.7	40.2	41.8	14.3	5.0	63.8	1.1	12.5	3.3	0.22	2.42	0.68					11,600	58
		9			3			41.7	43.4	14.9	4.8	66.2	1.1	9.6	3.4	0.23	2.51	0.71					12,050	
					4			49.0	51.0		5.6	77.8	1.3	11.2	4.1	0.27	2.95	0.83					14,150	
		625C1	1	3	2	7	5.7	39.9	46.6	7.8					3.6	0.21	2.26	1.13						58
		1			3			42.3	49.4	8.3					3.8	0.22	2.40	1.20						
					4			46.1	53.9						4.2	0.24	2.61	1.31						
		625C2	1	3	2	1	1.8	16.9	15.1	66.2					0.8	0.13	0.46	0.22						58
		2			3			17.2	15.4	67.4					0.8	0.13	0.47	0.22						
					4			52.8	47.2						2.5	0.40	1.44	0.69						
		625C3	1	3	2	10	4.8	41.1	47.6	6.5					3.2	0.18	2.32	0.73						58
		3			3			43.2	50.0	6.8					3.4	0.19	2.44	0.76						
					4			46.3	53.7						3.6	0.20	2.62	0.82						
		625C4	1	3	2	11	4.0	43.7	45.2	7.1					3.8	0.23	2.95	0.65						58
		4			3			45.5	47.1	7.4					4.0	0.24	3.07	0.68						
					4			49.2	50.8						4.3	0.26	3.32	0.73						
		625C5	1	3	2	7	3.5	39.2	41.0	16.3					5.3	0.28	4.44	0.60						58
		5			3			40.6	42.5	16.9					5.5	0.29	4.60	0.62						
					4			48.9	51.1						6.6	0.35	5.53	0.75						
		625C6	1	3	2	4	1.9	19.1	28.4	50.6					5.1	0.40	4.45	0.26						58
		6			3			19.5	28.9	51.6					5.2	0.41	4.54	0.26						
					4			40.2	59.8						10.8	0.84	9.37	0.55						
		625C1-6	1	3	2	40	4.2	38.8	43.1	13.9					3.9	0.23	2.99	0.70						58
		9*			3			40.5	45.0	14.5					4.1	0.24	3.12	0.73						
					4			47.3	52.7						4.8	0.28	3.65	0.85						
		625C1-6	1	3	2	40	3.7	38.9	44.1	13.3	5.0	65.0	1.2	11.5	4.0	0.22	3.09	0.68					11,760	58
		9			3			40.4	45.8	13.8	4.8	67.5	1.3	8.5	4.1	0.23	3.21	0.70					12,210	
					4			46.9	53.1		5.5	78.3	1.5	9.9	4.8	0.27	3.72	0.82					14,170	
Clinton	Lower Kittanning (No. 5)	631A	2	3	2*	29	7.9	38.3	41.4	12.4					4.6								11,160	60
		X			3			41.6	44.9	13.5					5.0								12,120	
					4			48.1	51.9						5.8								14,000	

		631B1	2	3	2	13	4.7	42.0	43.9	9.4					4.5								12,240	60
		1			3			44.1	46.1	9.8					4.8								12,850	
					4			48.9	51.1						5.3								14,250	
		631B2	2	3	2	22	2.3	35.7	40.9	21.1					5.5								10,600	60
		2			3			36.5	41.9	21.6					5.6								10,850	
					4			46.6	53.4						7.1								13,840	
		631B1,2	2	3	2*	35	7.4	36.5	40.7	15.4					4.8								10,800	60
		9			3			39.4	44.0	16.6					5.1								11,390	
					4			47.2	52.8						6.1								13,980	
		631B1,2	2	3	2	35	3.2	38.0	42.0	16.8					5.1								11,210	60
		9*			3			39.3	43.4	17.3					5.3								11,580	
					4			47.5	52.5						6.4								13,400	
		631C1	2	3	2	9	3.2	43.3	48.4	5.1					2.4								13,050	60
		1			3			44.7	50.0	5.3					2.5								13,480	
					4			47.2	52.8						2.6								14,230	
		631C2	2	3	2	17	3.7	40.8	49.4	6.1					3.3								12,620	60
		2			3			42.4	51.3	6.3					3.4								13,100	
					4			45.3	54.7						3.6								13,990	
		631C3	2	3	2	10	3.1	38.9	46.1	11.9					4.1								11,930	60
		3			3			40.1	47.6	12.3					4.2								12,310	
					4			45.8	54.2						4.8								14,040	
		631C1-3	2	3	2*	36	8.7	38.7	45.8	6.8					3.0								11,880	60
		9			3			42.4	50.2	7.4					3.2								13,010	
					4			45.8	54.2						3.5								14,050	
		631C1-3	2	3	2	36	3.4	40.9	48.2	7.5					3.3								12,530	60
		9*			3			42.3	49.9	7.8					3.4								12,970	
					4			45.9	54.1						3.7								14,060	
Wilkesville	Clarion (No. 4A)	807A	1	1	2	22	4.4	41.5	40.6	13.5	5.3	64.1	1.0	13.4	2.7	0.16	0.92	1.62	2230	2280	2490	2	11,690	76
		1			3			43.4	42.5	14.1	5.0	67.0	1.1	10.0	2.8	0.17	0.96	1.69					12,230	
					4			50.6	49.4		5.8	78.0	1.3	11.6	3.3	0.19	1.12	1.97					14,230	
		807B	1	1	2	6																		76
		2			3									no analysis										
					4																			
		807C	1	1	2	13	4.5	40.4	43.6	11.5	5.3	65.3	1.1	13.5	3.3	0.25	1.26	1.74	2060	2110	2540	2	11,740	76
		3			3			42.3	45.6	12.1	5.0	68.4	1.1	10.0	3.4	0.26	1.32	1.82					12,300	
					4			48.1	51.9		5.7	77.8	1.3	11.3	3.9	0.30	1.51	2.08					13,990	
		807D	1	1	2	18	4.2	39.8	40.0	16.0	5.1	62.2	1.0	12.0	3.7	0.26	1.50	1.92	2170	2220	2540	2	11,130	76
		4						41.5	41.8	16.7	4.8	64.9	1.1	8.7	3.8	0.27	1.56	2.00					11,610	
								49.8	50.2		5.8	77.9	1.3	10.4	4.6	0.32	1.87	2.40					13,940	
		807A,C,D	1	1	2	53	4.4	40.6	41.1	13.9	5.2	63.8	1.0	12.9	3.2	0.21	1.21	1.75	2170	2220	2520		11,510	76
		9*						42.5	43.0	14.5	4.9	66.7	1.2	9.4	3.3	0.22	1.25	1.82					12,040	
								49.7	50.3		5.8	78.1	1.2	11.0	3.9	0.26	1.47	2.14					14,090	
		808	1	1	2	58	4.6	36.9	36.5	22.0	4.8	56.5	0.9	11.8	4.0	0.42	1.99	1.58	2180	2280	2500	1½	10,060	76
		X			3			38.7	38.2	23.1	4.5	59.3	0.9	8.0	4.2	0.44	2.09	1.66					10,540	
					4			50.3	49.7		5.9	77.0	1.2	10.5	5.4	0.57	2.71	2.15					13,700	

Township	Seam	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
WASHINGTON COUNTY																								
Independence	Brookville (No. 4)	717	3	3	1	35	1.3	40.4	42.9	15.4					7.2	0.12	6.57	0.52					12,180	70
		X			3			40.9	43.5	15.6					7.3	0.12	6.65	0.53					12,340	
					4			48.5	51.5						8.6	0.14	7.88	0.63					14,620	
Liberty	Middle Kittanning (No. 6)	770	3	1	2	49	3.3	38.8	48.5	9.4	5.2	71.3	1.3	8.5	4.3	0.03	3.38	0.92	2090	2140	2190	6	13,100	76
		X						40.1	50.1	9.8	5.0	73.7	1.3	5.7	4.5	0.03	3.50	0.95					13,550	
								44.5	55.5		5.6	81.7	1.5	6.2	5.0	0.03	3.87	1.05					15,020	
Salem	Brookville (No. 4)	696	3	3	1	38	1.2	41.1	46.2	11.5					7.6	0.03	6.61	0.92					12,980	70
		X			3			41.5	46.8	11.7					7.7	0.03	6.69	0.93					13,140	
					4			47.0	53.0						8.7	0.03	7.57	1.06					14,870	
	Bedford	697	3	3	1	34	1.3	38.2	49.0	11.5					4.2	0.01	3.97	0.20					12,900	70
		X			3			38.7	49.6	11.7					4.2	0.01	4.02	0.21					13,080	
					4			43.8	56.2						4.8	0.01	4.55	0.22					14,810	
	Lower Kittanning (No. 5)	708	3	3	1	46	2.0	38.4	50.9	8.7	5.1	74.2	1.5	8.9	1.6	0.02	1.06	0.51	2560	2610	2640		13,340	70
		X			3			39.2	51.9	8.9	5.2	75.7	1.5	7.1	1.6	0.02	1.08	0.52					13,600	
					4			43.0	57.0		5.7	83.1	1.7	7.7	1.8	0.02	1.18	0.57					14,930	
		709	3	3	1	41	2.0	37.8	47.3	12.9	4.7	68.1	1.3	7.8	5.2	0.09	4.18	0.94	2040	2120	2240		12,610	70
		X			3			38.6	48.3	13.1	4.8	69.5	1.4	5.9	5.3	0.09	4.27	0.96					12,870	
					4			44.4	55.6		5.5	80.0	1.6	6.8	6.1	0.10	4.90	1.10					14,820	
	Middle Kittanning (No. 6)	707	3	3	1	42	1.9	37.8	48.1	12.2	4.8	69.8	1.3	8.5	3.4	0.06	2.72	0.66	2120	2280	2380		12,810	70
		X			3			38.5	49.0	12.5	4.8	71.2	1.3	6.7	3.5	0.06	2.77	0.68					13,070	
					4			44.0	56.0		5.5	81.4	1.5	7.6	4.0	0.06	3.16	0.78					14,930	

TABLE 2.–*Proximate-ultimate coal analyses by bed*

Key to symbols by column:

OGS file no.:
- X - whole bed sample or single sample excluding shale or partings
- 1-7 - samples taken vertically or in benches
- 9 - composite of bench samples
- 9* - mathematical average of bench samples

Kind:
- 1 - channel (deep mine)
- 2 - channel (strip mine)
- 3 - core
- 4 - run-of-mine: stockpile or tipple

Source:
- 1 - U.S. Bureau of Mines
- 2 - Ohio Geological Survey (no analyses performed in this group, see tables 11, 12)
- 3 - Engineering Experiment Station, Ohio State University
- 4 - miscellaneous

Condition:
- 1 - air-dried
- 2 - as received
- 2* - equilibrated
- 3 - moisture-free
- 4 - moisture- and ash-free

Analyzed thickness:
- F - density float separate of total sample
- * - not complete thickness; core bottomed in coal

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
BEDFORD COAL																								
Meigs	Lebanon	712	3	3	1	34	2.6	37.7	48.7	11.0					4.2	0.12	3.33	0.75					12,300	70
		X			3			38.7	50.0	11.3					4.3	0.12	3.42	0.77					12,630	
					4			43.6	56.4						4.9	0.13	3.87	0.86					14,250	
Monroe	Perry	689	3	3	1	37	0.9	37.1	41.3	20.7					6.8	0.03	5.58	1.15					11,570	70
		X			3			37.4	41.7	20.9					6.8	0.03	5.63	1.16					11,670	
					4			47.3	52.7						8.6	0.03	7.13	1.46					14,760	
Noble	Jackson	692	3	3	1	32	1.4	37.2	50.5	10.9					3.5	0.01	3.03	0.44					12,960	70
		X			3			37.7	51.2	11.1					3.5	0.01	3.07	0.45					13,140	
					4			42.4	57.6						4.0	0.01	3.45	0.50					14,780	
Washington	Salem	697	3	3	1	34	1.3	38.2	49.0	11.5					4.2	0.01	3.97	0.20					12,900	70
		X			3			38.7	49.6	11.7					4.2	0.01	4.02	0.21					13,080	
					4			43.8	56.2						4.8	0.01	4.55	0.22					14,810	
BROOKVILLE (NO. 4) COAL																								
Monroe	Franklin	703	3	3	1	36	1.5	40.2	46.2	12.1	4.9	70.7	1.1	7.2	4.0	0.06	2.76	1.13	2080	2150	2340		12,970	70
		X			3			40.8	46.9	12.3	5.0	71.8	1.1	5.8	4.0	0.06	2.80	1.15					13,160	
					4			46.5	53.5		5.7	81.8	1.3	6.6	4.6	0.06	3.21	1.30					15,000	
Morgan	Bristol	695	3	3	1	33	2.3	38.1	50.9	8.7					2.3	0.01	1.77	0.54					13,130	70
		X			3			39.0	52.1	8.9					2.4	0.01	1.81	0.56					13,440	
					4			42.8	57.2						2.6	0.01	1.99	0.60					14,750	
Noble	Elk	773	3	1	2	30	2.2	42.4	46.5	8.9	5.4	71.7	1.4	6.9	5.7	0.13	4.15	1.40	2080	2180	2280	7½	13,260	76
		X			3			43.3	47.6	9.1	5.2	73.3	1.4	5.2	5.8	0.13	4.24	1.43					13,550	
					4			47.6	52.4		5.8	80.6	1.5	5.7	6.4	0.15	4.66	1.57					14,910	
	Jackson	705	3	3	1	41	1.9	41.4	45.9	10.8	4.9	70.1	1.3	7.5	5.4	0.16	3.74	1.50	2040	2080	2250		12,930	70
		X			3			42.2	46.8	11.0	5.0	71.4	1.3	5.8	5.5	0.16	3.81	1.53					13,180	
					4			47.4	52.6		5.6	80.2	1.5	6.5	6.2	0.18	4.29	1.71					14,800	
Vinton	Brown	630A1	3	3	2	7	3.0	27.5	36.3	33.2														59
		1			3			28.3	37.5	34.2														
					4			43.0	57.0															
		630A2	3	3	2	17	4.2	34.6	45.7	15.5														59
		2			3			36.1	47.7	16.2														
					4			43.1	56.9															
		630A3	3	3	2	5	3.3	12.1	11.2	73.4														59
		3			3			12.5	11.6	75.9														
					4			51.9	48.1															
		630A4	3	3	2	1	4.2	40.1	45.8	9.9														59
		4			3			41.9	47.8	10.3														
					4			46.7	53.3															

		630A1-4	3	3	2	30	3.8	29.4	37.7	29.1														59
		9*			3			30.6	39.2	30.2														
					4			43.8	56.2															
		630A1,2	3	3	2	24	3.8	32.5	43.0	20.7														59
		9*			3			33.8	44.7	21.5														
					4			43.1	56.9															
		630A1,2	3	3	2	24	3.5	32.5	43.1	20.9	5.3	59.2	1.2	10.7	2.7	0.01	2.08	0.57					10,590	59
		9			3			33.7	44.6	21.7	5.1	61.3	1.2	7.9	2.8	0.01	2.16	0.59					10,970	
					4			43.0	57.0		6.5	78.3	1.5	10.2	3.5	0.01	2.76	0.75					14,010	
Washington	Independence	717	3	3	1	35	1.3	40.4	42.9	15.4					7.2	0.12	6.57	0.52					12,180	70
		X			3			40.9	43.5	15.6					7.3	0.12	6.65	0.53					12,340	
					4			48.5	51.5						8.6	0.14	7.88	0.63					14,620	
	Salem	696	3	3	1	38	1.2	41.1	46.2	11.5					7.6	0.03	6.61	0.92					12,980	70
		X			3			41.5	46.8	11.7					7.7	0.03	6.69	0.93					13,140	
					4			47.0	53.0						8.7	0.03	7.57	1.06					14,870	
CLARION (NO. 4A) COAL																									
Meigs	Columbia	804A	1	1	2	20	3.6	40.8	44.3	11.3	5.2	66.4	1.1	13.0	3.0	0.11	1.20	1.71	2100	2180	2350	3½	12,050	76
		1			3			42.4	45.9	11.7	5.0	68.9	1.2	10.1	3.1	0.11	1.24	1.78					12,500	
					4			48.0	52.0		5.7	78.1	1.3	11.3	3.6	0.13	1.41	2.02					14,160	
		804B	1	1	2	6	6.7	10.1	6.0	77.2	2.0	9.3	0.3	10.0	1.2	0.45	0.56	0.21	2500	2660	2800+	0	1,570	76
		2			3			10.8	6.5	82.7	1.3	9.9	0.3	4.5	1.3	0.48	0.60	0.23					1,680	
					4			62.7	37.3		7.8	57.8	1.8	25.1	7.5	2.79	3.46	1.30					9,750	
		804C	1	1	2	14	3.4	37.7	47.3	11.6	5.3	66.3	1.0	12.6	3.2	0.15	1.49	1.61	2000	2100	2275	1½	12,010	76
		3			3			39.0	49.0	12.0	5.1	68.7	1.1	9.7	3.4	0.16	1.54	1.66					12,430	
					4			44.3	55.7		5.8	78.1	1.2	11.1	3.8	0.18	1.75	1.89					14,130	
		804D	1	1	2	17	3.8	33.7	41.1	21.4	4.8	57.7	0.9	11.7	3.5	0.25	2.13	1.15	2410	2535	2640	1	10,320	76
		4			3			35.1	42.6	22.3	4.6	60.0	1.0	8.4	3.7	0.26	2.21	1.19					10,730	
					4			45.1	54.9		5.9	77.3	1.3	10.8	4.7	0.33	2.85	1.57					13,800	
		804A,C,D	1	1	2	51	3.6	37.6	44.0	14.8	5.1	63.5	1.0	12.4	3.2	0.16	1.59	1.48	2180	2280	2430		11,460	76
		9*			3			39.0	45.6	15.4	4.9	65.9	1.1	9.4	3.3	0.17	1.64	1.54					11,890	
					4			46.0	54.0		5.8	77.8	1.3	11.1	4.0	0.21	1.98	1.83					14,040	
		804A-D	1	1	2	57	3.9	34.7	40.0	21.4	4.8	57.7	0.9	12.2	3.0	0.19	1.48	1.35	2210	2320	2460		10,410	76
		9*			3			36.1	41.6	22.3	4.6	60.0	0.9	9.1	3.1	0.20	1.52	1.40					10,830	
					4			47.8	52.2		5.8	77.2	1.2	11.7	4.1	0.25	1.98	1.82					13,930	
		805	1	1	2	61	4.2	34.9	43.8	17.1	5.2	61.1	0.9	12.7	3.0	0.16	1.09	1.73	2110	2230	2310	1	11,090	76
		X			3			36.4	45.7	17.9	4.9	63.7	0.9	9.5	3.1	0.17	1.14	1.80					11,570	
					4			44.4	55.6		6.0	77.6	1.1	11.5	3.8	0.20	1.38	2.20					14,090	
	Salem	806A	1	1	2	23	2.9	37.7	38.4	21.0	4.8	58.6	0.9	8.6	6.1	0.03	4.40	1.67	1845	1945	1995	1	10,680	76
		1			3			38.8	39.6	21.6	4.6	60.4	0.9	6.2	6.3	0.03	4.54	1.72					11,000	
					4			49.5	50.5		5.9	77.0	1.2	7.9	8.0	0.04	5.79	2.19					14,030	
		806B	1	1	2	5	3.8	12.7	8.5	75.0	1.9	12.7	0.2	9.2	1.0	0.24	0.65	0.14	2775	2800+		0	2,030	76
		2			3			13.2	8.8	78.0	1.5	13.2	0.3	5.9	1.1	0.26	0.67	0.14					2,110	
					4			59.9	40.1		6.9	59.9	0.9	27.5	4.8	1.13	3.06	0.66					9,575	
		806C	1	1	2	11	3.0	41.7	42.8	12.5	5.3	65.3	0.8	10.6	5.5	0.23	3.50	1.75	2130	2180	2280	3	11,990	76
		3			3			42.9	44.2	12.9	5.1	67.4	0.8	8.2	5.6	0.24	3.60	1.80					12,350	
					4			49.3	50.7		5.9	77.3	0.9	9.4	6.5	0.27	4.13	2.07					14,170	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
CLARION (NO. 4A) COAL (continued)																								
Meigs (continued)	Salem (continued)	806D	1	1	2	15	3.2	34.4	37.9	24.5	4.4	52.9	0.9	9.4	7.9	0.02	5.99	1.86	2080	2130	2190	1	9,770	76
		4			3			35.5	39.2	25.3	4.2	54.6	0.9	6.9	8.1	0.02	6.19	1.93					10,090	
					4			47.5	52.5		5.7	73.2	1.2	9.0	10.9	0.03	8.29	2.57					13,520	
		806A,C,D	1	1	2	49	3.0	37.6	39.2	20.2	4.8	58.3	0.9	9.3	6.5	0.07	4.68	1.74	1980	2050	2120		10,690	76
		9*			3			38.8	40.4	20.8	4.6	60.2	0.9	6.8	6.7	0.07	4.83	1.79					11,020	
					4			48.9	51.1		5.8	75.9	1.2	8.6	8.5	0.08	6.18	2.26					13,920	
		806A-D	1	1	2	54	3.1	35.3	36.4	25.2	4.5	54.2	0.8	9.3	6.0	0.08	4.31	1.59	2050	2120	2180		9,890	76
		9*			3			36.4	37.6	26.0	4.3	55.9	0.8	6.8	6.2	0.09	4.44	1.64					10,200	
					4			49.2	50.8		5.8	75.6	1.1	9.1	8.4	0.11	6.01	2.25					13,790	
Muskingum	Hopewell	623A1	3	3	2	24	11.3	36.0	40.5	12.2					3.5	0.31	1.54	1.61					10,730	58
		1			3			40.6	45.7	13.7					3.9	0.35	1.74	1.81					12,100	
					4			47.0	53.0						4.5	0.41	2.02	2.09					14,010	
		623A2	3	3	2	8	11.3	31.9	36.5	20.3					9.1	3.29	5.42	0.44					7,950	58
		2			3			36.0	41.1	22.9					10.3	3.71	6.11	0.50					8,960	
					4			46.7	53.3						13.4	4.81	7.92	0.66					11,620	
		623A3	3	3	2	22	11.3	35.7	46.2	6.8					1.5	0.05	0.12	1.37					11,340	58
		3			3			40.2	52.1	7.7					1.7	0.06	0.12	1.56					12,790	
					4			43.6	56.4						1.9	0.07	0.15	1.67					13,850	
		623A4	3	3	2	25	11.3	34.9	46.3	7.5					1.9	0.16	0.41	1.35					10,690	58
		4			3			39.4	52.2	8.4					2.2	0.18	0.46	1.52					12,050	
					4			43.1	56.9						2.4	0.20	0.50	1.66					13,160	
		623A5	3	3	2	8	11.2	18.1	11.6	59.1					0.4	0.03	0.00	0.38					2,980	58
		5			3			20.4	13.1	66.5					0.5	0.03	0.00	0.43					3,360	
					4			60.9	39.1						1.4	0.10	0.00	1.28					10,020	
		623A1-5	3	3	2	87	11.3	35.2	44.4	9.1	5.4	61.3	1.1	20.8	2.3	0.21	0.72	1.39					10,860	58
		9			3			39.7	50.0	10.3	4.7	69.1	1.2	12.1	2.6	0.24	0.81	1.56					12,250	
					4			44.3	55.7		5.2	77.1	1.3	13.5	2.9	0.27	0.90	1.74					13,650	
		623A1-5	3	3	2	87	11.3	33.5	40.5	14.7					2.7	0.42	1.03	1.25					9,880	58
		9*			3			37.8	45.6	16.6					3.0	0.47	1.16	1.41					11,140	
					4			45.3	54.7						3.6	0.56	1.39	1.69					13,351	
		623A1-4	3	3	2	79	11.3	35.2	43.6	9.9					3.0	0.47	1.14	1.34					10,630	58
		9*			3			39.7	49.1	11.2					3.3	0.53	1.28	1.52					11,980	
					4			44.8	55.2						3.9	0.66	1.56	1.69					13,470	
Vinton	Wilkesville	807A	1	1	2	22	4.4	41.5	40.6	13.5	5.3	64.1	1.0	13.4	2.7	0.16	0.92	1.62	2230	2280	2490	2	11,690	76
		1			3			43.4	42.5	14.1	5.0	67.0	1.1	10.0	2.8	0.17	0.96	1.69					12,230	
					4			50.6	49.4		5.8	78.0	1.3	11.6	3.3	0.19	1.12	1.97					14,230	
		807B	1	1	2	6									no analysis									
		2			3																			
					4																			

		807C	1	1	2	13	4.5	40.4	43.6	11.5	5.3	65.3	1.1	13.5	3.3	0.25	1.26	1.74	2060	2110	2540	2	11,740	76
		3			3			42.3	45.6	12.1	5.0	68.4	1.1	10.0	3.4	0.26	1.32	1.82					12,300	
					4			48.1	51.9		5.7	77.8	1.3	11.3	3.9	0.30	1.51	2.08					13,990	
		807D	1	1	2	18	4.2	39.8	40.0	16.0	5.1	62.2	1.0	12.0	3.7	0.26	1.50	1.92	2170	2220	2540	2	11,130	76
		4			3			41.5	41.8	16.7	4.8	64.9	1.1	8.7	3.8	0.27	1.56	2.00					11,610	
					4			49.8	50.2		5.8	77.9	1.3	10.4	4.6	0.32	1.87	2.40					13,940	
		807A,C,D	1	1	2	53	4.4	40.6	41.1	13.9	5.2	63.8	1.0	12.9	3.2	0.21	1.21	1.75	2170	2220	2520		11,510	76
		9*			3			42.5	43.0	14.5	4.9	66.7	1.2	9.4	3.3	0.22	1.25	1.82					12,040	
					4			49.7	50.3		5.8	78.1	1.2	11.0	3.9	0.26	1.47	2.14					14,090	
		808	1	1	2	58	4.6	36.9	36.5	22.0	4.8	56.5	0.9	11.8	4.0	0.42	1.99	1.58	2180	2280	2500	1½	10,060	76
		X			3			38.7	38.2	23.1	4.5	59.3	0.9	8.0	4.2	0.44	2.09	1.66					10,540	
					4			50.3	49.7		5.9	77.0	1.2	10.5	5.4	0.57	2.71	2.15					13,700	
LOWER KITTANNING (NO. 5) COAL																									
Carroll	Brown	618A	2	3	2	39	2.0	39.8	47.7	10.5	5.0	69.0	1.3	7.8	6.4	0.14	4.71	1.52					12,610	57
		X			3			40.6	48.7	10.7	4.9	70.4	1.3	6.2	6.5	0.14	4.80	1.55					12,870	
								45.5	54.5		5.5	78.9	1.5	6.8	7.3	0.16	5.38	1.73					14,414	
		618B	4	3	2	48	2.1	40.8	46.3	10.8	5.1	68.3	1.3	9.5	5.0	0.46	2.64	1.90					12,480	57
		X			3			41.7	47.3	11.0	5.0	69.8	1.3	7.8	5.1	0.46	2.69	1.94					12,750	
					4			46.9	53.1		5.6	78.4	1.5	8.8	5.7	0.52	3.03	2.18					14,330	
Coshocton	Bethlehem	620A	2	3	2*	21	5.1	42.6	43.7	8.6					5.9								12,540	57
		X			3			44.9	46.0	9.1					6.3								13,210	
					4			49.4	50.6						6.9								14,530	
		620B	2	3	2*	23	5.1	43.8	43.4	7.7					5.2								12,730	57
		X			3			46.2	45.7	8.1					5.4								13,400	
					4			50.3	49.7						5.9								14,580	
		620C	2	3	2*	25	5.3	42.6	43.4	8.7					6.4								12,500	57
		X			3			45.0	45.8	9.2					6.7								13,200	
					4			49.5	50.5						7.4								14,530	
		620D	2	3	2	21	2.2	43.0	42.9	11.9	5.1	65.5	1.1	8.2	8.2	0.09	6.98	1.13					12,290	57
		X			3			44.0	43.9	12.1	4.9	67.0	1.2	6.4	8.4	0.09	7.13	1.15					12,570	
					4			50.1	49.9		5.6	76.3	1.3	7.3	9.5	0.10	8.12	1.31					14,310	
	Virginia	745A	2	1	2	11	6.9	37.2	48.4	7.5	5.5	68.5	1.2	14.7	2.6	0.09	1.17	1.36	1920	1960	2000	4	12,220	76
		1			3			39.9	52.1	8.0	5.1	73.6	1.3	9.2	2.8	0.10	1.26	1.46					13,130	
					4			43.4	56.6		5.5	80.1	1.4	9.9	3.1	0.10	1.37	1.59					14,280	
		745B	2	1	2	10	6.1	41.1	44.9	7.9	5.4	68.3	1.2	13.4	3.8	0.15	2.51	1.18	1960	2010	2130	3½	12,370	76
		2			3			43.7	47.9	8.4	5.0	72.7	1.3	8.5	4.1	0.16	2.67	1.26					13,170	
					4			47.7	52.3		5.5	79.4	1.4	9.2	4.5	0.17	2.92	1.37					14,390	
		745C	2	1	2	6	6.9	40.6	43.8	8.7	5.6	67.2	0.8	13.7	4.0	0.12	2.13	1.79	1960	2010	2130	3½	12,170	76
		3			3			43.6	47.1	9.3	5.1	72.2	0.9	8.2	4.3	0.13	2.29	1.93					13,080	
					4			48.1	51.9		5.7	79.6	1.0	8.9	4.8	0.14	2.52	2.12					14,420	
		745D	2	1	2	9	6.0	42.9	44.9	6.2	5.7	69.1	1.3	13.7	4.0	0.09	2.12	1.81	1990	2040	2090	4	12,610	76
		4			3			45.6	47.8	6.6	5.3	73.5	1.4	8.9	4.3	0.09	2.26	1.93					13,410	
					4			48.8	51.2		5.7	78.7	1.5	9.5	4.6	0.10	2.42	2.07					14,360	
		745A-D	2	1	2	36	6.4	40.3	45.8	7.5	5.5	68.5	1.1	13.9	3.5	0.11	1.94	1.49	1960	2000	2080		12,350	76
		9*			3			43.0	49.0	8.0	5.1	73.1	1.2	8.8	3.8	0.11	2.07	1.60					13,190	
					4			46.8	53.2		5.6	69.5	1.3	9.5	4.1	0.12	2.25	1.73					14,340	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LOWER KITTANNING (NO. 5) COAL (continued)																								
Hocking	Ward	627A1	2	3	2	6	11.1	34.8	44.3	9.8					2.4								10,990	59
		1			3			39.1	49.9	11.0					2.7								12,360	
					4			44.0	56.0						3.1								13,890	
		627A2	2	3	2	12	11.1	34.1	41.0	13.8					0.8								10,060	59
		2			3			38.4	46.1	15.5					0.9								11,320	
					4			45.4	54.6						1.1								13,400	
		627A1,A2	2	3	2	18	11.1	34.6	42.3	12.0					1.3	0.15	0.61	0.56					10,450	59
		9			3			38.9	47.6	13.5					1.5	0.17	0.69	0.63					11,750	
					4			45.0	55.0						1.7	0.20	0.79	0.73					13,590	
		627A1,A2	2	3	2	18	11.1	34.3	42.1	12.5					1.4								10,370	59
		9*			3			38.6	47.3	14.1					1.5								11,670	
					4			44.9	55.1						1.8								13,560	
		627B1	2	3	2	8	11.6	36.4	47.1	4.9					0.8								11,500	59
		1			3			41.2	53.3	5.5					1.0								13,100	
					4			43.6	56.4						1.0								13,770	
		627B2	2	3	2	13	11.6	36.6	43.0	8.8					0.5								10,690	59
		2			3			41.4	48.6	10.0					0.6								12,090	
					4			46.0	54.0						0.7								13,430	
		627B1,2	2	3	2	21	11.6	36.4	44.8	7.2					0.7	0.04	0.05	0.66					11,010	59
		9			3			41.2	50.7	8.1					0.8	0.05	0.06	0.74					12,450	
					4			44.8	55.2						0.9	0.05	0.06	0.81					13,560	
		627B1,2	2	3	2	21	11.6	36.5	44.5	7.4					0.7								10,990	59
		9*			3			41.3	50.4	8.3					0.7								12,460	
					4			45.1	54.9						0.8								13,560	
Holmes	Walnut Creek	614A1	2	3	2	15	6.5	39.5	46.0	8.0					5.4	0.24	3.45	1.67					12,230	57
		1			3			42.2	49.2	8.6					5.7	0.26	3.69	1.78					13,080	
					4			46.2	53.8						6.3	0.28	4.04	1.95					14,310	
		614A2	2	3	2	5	5.7	39.0	42.2	13.1					10.7	0.18	8.89	1.68					11,530	57
		2			3			41.4	44.7	13.9					11.4	0.19	9.43	1.78					12,210	
					4			48.1	51.9						13.2	0.22	10.95	2.07					14,180	
		614A3	2	3	2	22	6.3	40.1	45.4	8.2					4.1	0.05	2.28	1.82					12,240	57
		3			3			42.8	48.4	8.8					4.2	0.05	2.43	1.73					13,060	
					4			46.9	53.1						4.6	0.05	2.66	1.90					14,320	
		614A4	2	3	2	2	6.7	31.9	37.4	24.0					11.2	0.28	9.93	1.04					9,610	57
		4			3			34.2	40.1	25.7					12.1	0.30	10.64	1.12					10,300	
					4			46.0	54.0						16.2	0.40	14.32	1.51					13,865	
		614A1-4	2	3	2	44	6.3	39.4	44.8	9.5					5.7	0.14	3.82	1.71					12,020	57
		9*			3			42.0	47.8	10.2					5.9	0.15	4.08	1.72					12,830	
					4			46.8	53.2						6.7	0.16	4.54	2.03					14,280	

		614B	2	3	2	48	2.0	40.5	43.3	14.2	4.8	63.9	1.1	7.1	8.9	0.12	7.40	1.44					11,950	57
		X			3			41.3	44.2	14.5	4.7	65.2	1.1	5.4	9.1	0.12	7.55	1.46					12,200	
					4			48.3	51.7		5.5	76.2	1.3	6.3	10.7	0.14	8.83	1.71					14,250	
Jackson	Bloomfield	637	2	3	2	29	4.3	36.8	48.8	10.1					1.9								12,190	62
		X			3			38.4	51.0	10.6					2.0								12,740	
					4			42.9	57.1						2.2								14,260	
	Madison	616A1	2	3	2	8	8.6	27.9	36.2	27.3					2.2	0.02	1.56	0.67					8,740	57
		1			3			30.5	39.6	29.9					2.5	0.02	1.69	0.75					9,570	
					4			43.5	56.5						3.5	0.03	2.41	1.07					13,650	
		616A2	2	3	2	16	9.7	32.1	46.9	11.3					1.1	0.01	0.55	0.56					11,210	57
		2			3			35.6	52.0	12.4					1.3	0.01	0.60	0.69					12,410	
					4			40.6	59.4						1.4	0.01	0.69	0.72					14,170	
		616A3	2	3	2	6	11.7	33.1	52.0	3.2					1.0	0.01	0.57	0.46					12,210	57
		3			3			37.5	58.9	3.6					1.2	0.01	0.64	0.52					13,830	
					4			38.9	61.1						1.2	0.01	0.66	0.54					14,350	
		616A4	2	3	2	6	7.8	41.4	48.0	2.8					0.7	0.01	0.15	0.59					12,950	57
		4			3			44.9	52.1	3.0					0.8	0.01	0.16	0.64					14,050	
					4			46.3	53.7						0.8	0.01	0.17	0.66					14,480	
		616A1-4	2	3	2	36	9.5	32.8	45.6	12.1					1.3	0.01	0.72	0.57					11,110	57
		9*			3			36.2	50.4	13.4					1.4	0.01	0.80	0.62					12,270	
					4			41.8	58.2						1.6	0.01	0.92	0.72					14,170	
		616B1	2	3	2	9	8.6	30.9	38.8	21.7					2.7	0.04	1.95	0.70					9,640	57
		1			3			33.8	42.5	23.7					2.9	0.04	2.13	0.77					10,550	
					4			44.3	55.7						3.8	0.05	2.79	1.01					13,830	
		616B2	2	3	2	16	9.7	33.5	47.6	9.2					1.1	0.01	0.53	0.58					11,480	57
		2			3			37.1	52.7	10.2					1.2	0.01	0.58	0.65					12,710	
					4			41.3	58.7						1.4	0.01	0.65	0.72					14,150	
		616B3	2	3	2	6	10.4	35.9	50.5	3.2					1.2	0.01	0.69	0.46					12,260	57
		3			3			40.0	56.4	3.6					1.3	0.01	0.76	0.51					13,680	
					4			41.5	58.5						1.3	0.01	0.79	0.53					14,190	
		616B4	2	3	2	4	8.6	40.2	46.8	4.4					1.0	0.01	0.51	0.52					12,550	57
		4			3			44.0	51.2	4.8					1.1	0.01	0.55	0.56					13,770	
					4			46.2	53.8						1.2	0.01	0.58	0.59					14,460	
		616B1-4	2	3	2	35	9.3	33.9	45.7	11.1					1.5	0.02	0.92	0.58					11,240	57
		9*			3			37.4	50.4	12.2					1.7	0.02	1.02	0.65					12,400	
					4			42.6	57.4						1.9	0.02	1.16	0.74					14,120	
Lawrence	Elizabeth	617A1	2	3	1	8	2.8	41.0	49.6	6.6					1.9									57
		1			2*		7.2	39.1	47.4	6.3					1.8								12,310	
					3			42.1	51.1	6.8					1.9								13,260	
					4			45.2	54.8						2.0								14,230	
		617A2	2	3	1	12	2.7	35.1	44.0	18.2					1.3									57
		2			2*		7.5	33.4	41.8	17.3					1.3								10,710	
					3			36.1	45.2	18.7					1.4								11,580	
					4			44.4	55.6						1.7								14,270	
		617A3	2	3	1	14	2.3	42.0	44.5	12.2					2.8									57
		3			2*		7.1	39.9	42.4	10.6					2.5								11,820	
					3			42.9	45.7	11.4					2.7								12,720	
					4			48.5	51.5						3.1								14,360	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LOWER KITTANNING (NO. 5) COAL (continued)																								
Lawrence (continued)	Elizabeth (continued)	617A4	2	3	1	7	2.0	34.9	35.0	28.1					6.3									57
		4			2*		7.1	33.2	33.0	26.7					6.0								9,080	
					3			35.7	35.6	28.7					6.5								9,770	
					4			50.2	49.8						9.1								13,720	
		617A1-4	2	3	1	41	3.1	39.0	42.8	15.1	5.0	63.9	1.3	11.5	3.2									57
		9			2*		7.2	37.3	41.1	14.4	5.2	61.2	1.3	14.8	3.1	0.11	2.50	0.52					11,130	
					3			40.2	44.3	15.5	4.8	65.9	1.4	9.0	3.4	0.12	2.69	0.56					11,990	
					4			47.6	52.4		5.6	78.1	1.7	10.6	4.0	0.14	3.19	0.66					14,200	
		617A1-4	2	3	1	41	2.5	38.6	43.6	15.3					2.8									57
		9*			2*		7.3	36.7	41.5	14.5					2.6								11,110	
					3			39.6	44.8	15.6					2.8								11,980	
					4			46.9	53.1						3.6								14,200	
		617B	4	3	2*	34	7.1	34.6	39.6	18.7	5.7	57.2	1.1	14.3	3.0	0.07	2.53	0.43					10,390	57
		X			3			37.2	42.7	20.1	5.3	61.6	1.2	8.5	3.3	0.08	2.72	0.46					11,180	
					4			46.6	53.4		6.6	77.2	1.5	10.6	4.1	0.09	3.41	0.58					14,000	
	Hamilton	632A1	2	3	2	34	9.9	37.3	47.9	4.9					0.9								12,200	60
		1			3			41.4	53.2	5.4					1.0								13,540	
					4			43.8	56.2						1.0								14,310	
		632A2	2	3	2	14	8.7	39.0	46.5	5.8					2.8								12,190	60
		2			3			42.7	50.9	6.4					3.1								13,350	
					4			45.6	54.4						3.3								14,260	
		632A1,2	2	3	2	48	9.5	37.8	47.5	5.2					1.4								12,200	60
		9*			3			41.8	52.5	5.7					1.6								13,480	
					4			44.3	55.7						1.6								14,300	
		632B	2	3	2	42	9.2	36.3	45.4	9.1					2.5								11,620	60
		X			3			40.0	50.0	10.0					2.7								12,800	
					3			44.4	55.6						3.0								14,220	
		634	2	3	2*	30	6.2	39.9	45.8	8.1	5.5	67.7	1.5	14.6	2.6								12,315	61
		X			3			42.6	48.8	8.6	5.2	72.2	1.5	9.8	2.7								13,130	
					4			46.6	53.4		5.6	79.0	1.7	10.7	3.0								14,370	
	Washington	633A1	2	3	2	22	9.1	36.6	48.7	5.6					0.8									60
		1			3			40.2	53.5	6.3					0.9									
					4			42.9	57.1						0.9									
		633A2	2	3	2	7	8.6	35.8	46.2	9.4					1.6									60
		2			3			39.2	50.5	10.3					1.8									
					4			43.7	56.3						2.0									
		633A1,2	2	3	2	29	8.7	36.8	47.8	6.7					1.2									60
		9			3			40.3	52.3	7.4					1.3									
					4			43.5	56.5						1.4									

		633A1,29*	2	3	2 3 4	29	9.0	36.4 40.0 43.1	48.1 52.9 56.9	6.5 7.1					1.0 1.1 1.2								60
		633B1 1	2	3	2 3 4	22	9.3	36.8 40.6 44.3	46.2 50.9 55.7	7.7 8.5					0.8 0.9 1.0								60
		633B2 2	2	3	2 3 4	7	8.6	35.4 38.7 44.5	44.2 48.3 55.5	11.8 13.0					2.4 2.7 3.1								60
		633B1,29	2	3	2 3 4	29	9.2	36.1 39.8 44.1	45.9 50.5 55.9	8.8 9.7					1.3 1.5 1.6								60
		633B1,29*	2	3	2 3 4	29	9.1	36.5 40.1 44.4	45.7 50.3 55.6	8.7 9.6					1.2 1.3 1.4								60
		645 X	2	3	2* 3 4	26	7.8	35.7 38.7 43.8	45.8 49.7 56.2	10.7 11.6					1.1 1.2 1.4							11,520 12,500 14,140	63
		646A1 1	2	3	2* 3 4	16	8.7			5.6 6.1					0.8 0.9 1.1							12,180 13,350 14,220	63
		646A2 2	2	3	2 3 4	5	8.1			9.3 10.1					2.4 2.6 2.9							11,574 12,600 14,020	63
		646A1,29*	2	3	2 3 4	21	8.6			6.4 7.0					1.2 1.3 1.4							12,040 13,170 14,170	63
Mahoning	Beaver	622-1 1	2	3	2* 3 4	26	5.4	36.7 38.8 40.0	55.1 58.2 60.0	2.8 3.0	5.6 5.3 5.4	76.5 80.8 83.3	1.4 1.5 1.5	12.6 8.2 8.5	1.1 1.2 1.3	0.02 0.02 0.02	0.61 0.65 0.67	0.52 0.55 0.57				13,590 14,370 14,810	57
		622-2 2	2	3	2* 3 4	6	3.1	35.7 36.9 46.4	41.3 42.6 53.6	19.9 20.5	4.9 4.7 5.9	63.8 65.8 82.8	1.2 1.2 1.6	9.3 6.8 8.5	0.9 1.0 1.2	0.02 0.02 0.03	0.51 0.53 0.66	0.40 0.41 0.52				11,430 11,800 14,840	57
		622-1,29*	2	3	2* 3 4	32	5.0	36.5 38.4 40.9	52.7 55.5 59.1	5.8 6.1	5.5 5.2 5.5	74.2 78.1 83.2	1.4 1.4 1.5	12.0 8.0 8.6	1.1 1.2 1.2	0.02 0.02 0.02	0.59 0.62 0.66	0.49 0.52 0.56				13,220 13,920 14,820	57
		635 X	2	3	2* 3 4	30	5.2	37.4 39.5 40.8	54.3 57.2 59.2	3.1 3.3	5.5 5.2 5.4	77.3 81.5 84.3	1.6 1.7 1.7	11.5 7.3 7.5	1.0 1.0 1.1							13,590 14,340 14,820	61
	Smith	611A1 1	2	3	2 3 4	19	4.4	39.8 41.6 46.3	46.2 48.4 53.7	9.6 10.0					3.1 3.2 3.6	0.02 0.02 0.02	1.84 1.92 2.13	1.21 1.27 1.41				12,610 13,190 14,660	55
		611A2 2	2	3	2 3 4	5	4.4	23.5 24.6 47.0	26.5 27.7 53.0	45.6 47.7					2.0 2.1 4.0	0.02 0.02 0.04	1.38 1.44 2.75	0.62 0.65 1.25				6,980 7,300 13,960	55
		611A3 3	2	3	2 3 4	15	4.4	41.4 43.3 46.7	47.2 49.4 53.3	7.0 7.3					3.5 3.7 4.0	0.03 0.03 0.03	2.37 2.48 2.67	1.12 1.17 1.27				12,980 13,580 14,650	55

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LOWER KITTANNING (NO. 5) COAL (continued)																								
Mahoning (continued)	Smith (continued)	611A1-3	2	3	2	39	4.4	38.3	44.1	13.2					3.1	0.02	1.97	1.11					12,030	55
		9*			3			40.1	46.1	13.8					3.2	0.02	2.06	1.16					12,580	
					4			46.5	53.5						3.8	0.02	2.40	1.34					14,600	
		611B1	2	3	2	20	4.4	40.0	46.6	9.0					4.2	0.03	2.97	1.17					12,670	55
		1			3			41.8	48.8	9.4					4.4	0.03	3.11	1.22					13,250	
					4			46.2	53.8						4.8	0.03	3.43	1.35					14,630	
		611B2	2	3	2	5	4.4	27.2	30.5	37.9					2.3	0.03	1.72	0.56					8,200	55
		2			3			28.5	31.9	39.6					2.4	0.03	1.80	0.59					8,580	
					4			47.2	52.8						4.0	0.05	2.98	0.97					14,110	
		611B3	2	3	2	15	4.4	40.3	47.7	7.6					4.0	0.05	2.83	1.11					12,900	55
		3			3			42.2	49.9	7.9					4.2	0.05	2.96	1.16					13,490	
					4			45.8	54.2						4.5	0.06	3.21	1.25					14,660	
		611B1-3	2	3	2	41	4.4	37.7	44.0	13.9					3.8	0.04	2.70	1.02					11,910	55
		9*			3			39.4	46.1	14.5					3.9	0.04	2.82	1.07					12,460	
					4			46.1	53.9						4.6	0.05	3.29	1.25					14,570	
		611C1	2	3	2	18	4.4	39.6	48.2	7.8					3.2	0.03	2.14	1.01					12,820	55
		1			3			41.4	50.4	8.2					3.3	0.03	2.24	1.06					13,410	
					4			45.1	54.9						3.6	0.03	2.44	1.16					14,600	
		611C2	2	3	2	6	4.4	26.8	30.4	38.4					1.7	0.02	1.02	0.65					8,140	55
		2			3			28.0	31.8	40.2					1.8	0.02	1.07	0.68					8,510	
					4			46.8	53.2						3.0	0.03	1.80	1.14					14,230	
		611C3	2	3	2	15	4.4	41.1	46.8	7.7					3.6	0.03	2.59	0.95					12,880	55
		1			3			43.0	49.0	8.0					3.7	0.03	2.71	0.99					13,470	
					4			46.7	53.3						4.0	0.03	2.94	1.08					14,650	
		611C1-3	2	3	2	39	4.4	37.9	44.5	13.2					3.1	0.03	2.10	0.93					12,010	55
		9*			3			39.6	46.6	13.8					3.2	0.03	2.20	0.97					12,560	
					4			46.0	54.0						3.7	0.04	2.55	1.12					14,570	
Monroe	Franklin	702	3	3	1	36	1.5	38.1	45.5	14.9	4.7	67.5	1.0	6.1	5.8	0.06	4.52	1.20	2190	2280	2320		12,390	70
		X			3			38.7	46.2	15.1	4.7	68.5	1.1	4.7	5.9	0.06	4.59	1.22					12,570	
					4			45.6	54.4		5.6	80.6	1.3	5.6	6.9	0.07	5.41	1.43					14,810	
	Jackson	698	3	3	1	47	1.2	38.9	50.6	9.3	5.1	74.3	1.3	6.9	3.1	0.01	2.33	0.79	2200	2280	2440		13,460	70
		X			3			39.4	51.2	9.4	5.1	75.2	1.4	5.7	3.2	0.01	2.36	0.80					13,620	
					4			43.5	56.5		5.7	83.0	1.5	6.3	3.5	0.01	2.60	0.88					15,030	
Muskingum	Newton	626A1	2	3	2	4	9.1	33.8	41.6	15.5					4.8								10,670	59
		1			3			37.2	45.8	17.0					5.3								11,740	
					4			44.8	55.2						6.4								14,150	
		626A2	2	3	2	38	9.1	38.8	46.1	6.0					2.3								12,070	59
		2			3			42.7	50.7	6.6					2.5								13,280	
					4			45.7	54.3						2.7								14,220	

		626A3	2	3	2	8	9.1	35.9	47.5	7.5					3.1								11,830	59
		3			3			39.5	52.2	8.3					3.4								13,010	
					4			43.1	56.9						3.7								14,180	
		626A1-3	2	3	2	50	9.1	37.4	45.9	7.6					2.5	0.31	1.37	0.81					11,840	59
		9			3			41.1	50.5	8.4					2.7	0.34	1.51	0.89					13,020	
					4			44.9	55.1						3.0	0.37	1.65	0.97					14,210	
		626A1-3	2	3	2	50	9.1	37.9	45.7	7.3					2.7								11,880	59
		9*			3			41.7	50.3	8.0					3.0								13,070	
					4			45.3	54.7						3.2								14,210	
		626B1	2	3	2	7	11.8	36.7	44.8	6.7					2.5								11,480	59
		1			3			41.6	50.8	7.6					2.8								13,020	
					4			45.0	55.0						3.0								14,090	
		626B2	2	3	2	35	11.8	35.9	48.1	4.2					0.8								11,540	59
		2			3			40.7	54.5	4.8					0.9								13,080	
					4			42.8	57.2						0.9								13,740	
		626B3	2	3	2	8	11.8	36.0	47.8	4.4					0.9								11,380	59
		3			3			40.8	54.2	5.0					1.0								12,900	
					4			42.9	57.1						1.1								13,580	
		626B1-3	2	3	2	50	11.8	36.2	47.1	4.9					1.2								11,480	59
		9			3			41.1	53.4	5.5					1.4								13,020	
					4			43.5	56.5						1.4								13,780	
		626B1-3	2	3	2	50	11.8	36.1	47.4	4.7					1.1								11,500	59
		9*			3			40.9	53.8	5.3					1.2								13,040	
					4			43.2	56.8						1.3								13,770	
Noble	Elk	772	3	1	2	64	2.8	37.6	53.4	6.2	5.4	75.0	1.5	11.0	0.9	0.01	0.41	0.45	2430	2480	2740	5	13,690	76
		X			3			38.7	54.9	6.4	5.3	77.1	1.6	8.7	0.9	0.01	0.42	0.46					14,070	
					4			41.3	58.7		5.6	82.4	1.7	9.3	1.0	0.01	0.45	0.49					15,030	
	Jackson	691	3	3	1	30	1.3	41.5	45.9	11.3					6.1	0.02	5.37	0.68					12,850	70
		X			3			42.0	46.5	11.5					6.1	0.02	5.44	0.69					13,030	
					4			47.4	52.6						6.9	0.02	6.14	0.77					14,710	
Perry	Clayton	615A1	2	3	2	7	7.1	39.9	44.7	8.3					5.2	0.03	3.46	1.71					12,110	56
		1			3			42.9	48.1	9.0					5.6	0.03	3.73	1.83					13,030	
					4			47.1	52.9						6.1	0.03	4.10	2.01					14,320	
		615A2	2	3	2	15	6.0	39.7	41.5	12.8					10.0	0.07	8.48	1.41					11,420	56
		2			3			42.2	44.2	13.6					10.6	0.08	9.02	1.49					12,150	
					4			48.9	51.1						12.2	0.08	10.44	1.73					14,060	
		615A3	2	3	2	12	5.7	39.7	42.6	12.0					5.3	0.04	3.70	1.56					11,740	56
		3			3			42.1	45.2	12.7					5.6	0.04	3.92	1.65					12,460	
					4			48.2	51.8						6.4	0.05	4.49	1.89					14,270	
		615A4	2	3	2	5	5.9	41.5	43.0	9.6					5.6	0.03	4.14	1.42					12,130	56
		4			3			44.1	45.7	10.2					5.9	0.03	4.39	1.50					12,890	
					4			49.1	50.9						6.6	0.03	4.89	1.67					14,350	
		615A1-4	2	3	2	39	6.1	40.0	42.6	11.3					7.1	0.04	5.59	1.50					11,740	56
		9*			3			42.6	45.4	12.0					7.6	0.05	5.96	1.60					12,500	
					4			48.4	51.6						8.7	0.06	6.78	1.82					14,220	
		615A1-4	2	3	2	39	5.7	40.1	42.5	11.7	5.3	62.9	1.2	11.5	7.4	0.11	5.74	1.52					11,728	56
		9			3			42.5	45.1	12.4	5.0	66.7	1.3	6.8	7.8	0.11	6.08	1.61					12,430	
					4			48.5	51.5		5.6	76.3	1.5	7.7	8.9	0.12	6.94	1.84					14,190	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LOWER KITTANNING (NO. 5) COAL (continued)																								
Perry (continued)	Clayton (continued)	615B1	2	3	2	4	7.4	36.0	37.4	19.2					4.7	0.03	2.99	1.73					10,308	56
		1			3			38.9	40.4	20.7					5.1	0.03	3.23	1.86					11,130	
					4			49.1	50.9						6.5	0.04	4.07	2.35					14,040	
		615B2	2	3	2	15	5.8	41.6	43.1	9.5					8.0	0.05	6.38	1.54					12,052	56
		2			3			44.2	45.7	10.1					8.4	0.05	6.77	1.63					12,790	
					4			49.2	50.8						9.4	0.06	7.53	1.81					14,230	
		615B3	2	3	2	17	5.2	40.9	42.4	11.5					6.3	0.04	4.80	1.45					11,870	56
		3			3			43.2	44.7	12.1					6.6	0.04	5.06	1.52					12,520	
					4			49.1	50.9						7.5	0.05	5.75	1.73					14,240	
		615B4	2	3	2	6	5.1	41.3	41.9	11.7					7.3	0.05	6.01	1.29					11,870	56
		4			3			43.5	44.2	12.3					7.7	0.05	6.33	1.36					12,510	
					4			49.6	50.4						8.8	0.06	7.22	1.55					14,260	
		615B1-4	2	3	2	42	5.6	40.7	42.1	11.6					6.9	0.04	5.35	1.48					11,790	56
		9*			3			43.1	44.6	12.3					7.3	0.04	5.73	1.56					12,510	
					4			49.2	50.8						8.3	0.05	6.52	1.77					14,230	
		615B1-4	2	3	2	42	5.3	40.7	42.5	11.5	5.2	63.8	1.2	11.3	7.0	0.07	5.47	1.47					11,860	56
		9			3			43.0	44.9	12.1	4.9	67.4	1.3	6.9	7.4	0.07	5.79	1.55					12,520	
					4			48.9	51.1		5.5	76.7	1.5	7.9	8.4	0.08	6.59	1.76					14,240	
		615C1	2	3	2	7	7.1	40.4	42.8	9.7					5.3	0.03	4.04	1.24					11,880	56
		1			3			43.5	46.1	10.4					5.7	0.03	4.34	1.33					12,790	
					4			48.5	51.5						6.4	0.03	4.84	1.49					14,270	
		615C2	2	3	2	13	8.2	38.3	43.8	9.7					6.6	0.04	5.49	1.05					11,700	56
		2			3			41.7	47.7	10.6					7.1	0.04	5.97	1.14					12,740	
					4			46.6	53.4						8.0	0.04	6.68	1.28					14,250	
		615C3	2	3	2	17	6.8	40.2	43.3	9.7					4.6	0.03	3.67	0.95					11,940	56
		3			3			43.2	46.4	10.4					5.0	0.03	3.93	1.02					12,810	
					4			48.2	51.8						5.6	0.03	4.39	1.14					14,300	
		615C4	2	3	2	5	5.7	36.4	39.1	18.8					7.7	0.30	6.19	1.20					10,670	56
		4			3			38.6	41.5	19.9					8.1	0.31	6.56	1.28					11,320	
					4			48.2	51.8						10.2	0.39	8.19	1.60					14,130	
		615C1-4	2	3	2	42	7.1	39.2	42.9	10.8					5.7	0.06	4.58	1.05					11,710	56
		9*			3			42.2	46.2	11.6					6.1	0.06	4.92	1.14					12,610	
					4			47.9	52.1						6.9	0.07	5.56	1.29					14,260	
		615C1-4	2	3	2	42	6.7	39.4	43.5	10.4	5.3	64.7	1.2	12.9	5.5	0.05	4.28	1.14					11,810	56
		9			3			42.2	46.6	11.2	4.9	69.3	1.3	7.5	5.8	0.05	4.58	1.22					12,730	
					4			47.5	52.5		5.5	78.0	1.5	8.4	6.6	0.06	5.16	1.37					14,340	
		609	3	3	2*	33	2.4	40.9	44.0	12.7	4.8	62.3	1.3	12.7	6.2	0.57	4.70	0.97					11,617	54
		X			3			41.9	45.1	13.0	4.9	63.8	1.3	10.6	6.4	0.58	4.81	0.99					11,900	
					4			48.2	51.8		5.4	73.4	1.5	12.4	7.3	0.67	5.53	1.14					13,680	

		610	3	3	2*	34	2.6	42.6	42.3	12.5	4.7	59.3	1.2	14.8	7.5	1.45	4.92	1.14				11,230	54
		X			3			43.8	43.4	12.8	4.9	60.8	1.3	12.5	7.7	1.48	5.05	1.17				11,530	
					4			50.2	49.8		5.2	69.9	1.4	14.7	8.8	1.70	5.79	1.34				13,230	
		636	2	3	2	54	6.0	41.8	43.4	8.8					4.2							12,180	62
		X			3			44.5	46.2	9.3					4.5							12,960	
					4			49.0	51.0						5.0							14,290	
	Pike	644A	1	3	2	34	7.0	40.7	44.9	7.4					3.6							12,350	63
		1			3			43.8	48.2	8.0					3.8							13,280	
					4			47.5	52.5						4.2							14,430	
		644B	1	3	2	3	5.5	35.2	37.5	21.8					1.8							10,440	63
		2			3			37.2	39.7	23.1					1.9							11,050	
					4			48.4	51.6						2.5							14,360	
		644A,B	1	3	2	37	6.9	40.2	44.3	8.6					3.4							12,190	63
		9*			3			43.2	47.6	9.2					3.6							13,100	
					4			47.6	52.4						4.0							14,420	
Tuscarawas	Lawrence	621	2	3	2*	36	2.4	40.3	46.3	11.0	5.0	67.6	1.2	9.1	6.1	0.12	4.83	1.21				12,400	57
		X			3			41.3	47.4	11.3	4.8	69.3	1.2	7.1	6.3	0.12	4.95	1.24				12,710	
					4			46.5	53.5		5.5	78.0	1.4	8.0	7.1	0.14	5.57	1.40				14,320	
	Sugar Creek	612A1	2	3	2	10	7.3	38.2	45.3	9.2					5.8	0.09	4.08	1.59				11,940	56
		1			3			41.2	48.9	9.9					6.2	0.10	4.40	1.71				12,880	
					4			45.7	54.3						6.9	0.11	4.88	1.90				14,295	
		612A2	2	3	2	12	7.0	41.1	45.6	6.3					5.0	0.14	3.33	1.53				12,470	56
		2			3			44.2	49.0	6.8					5.4	0.15	3.58	1.64				13,410	
					4			47.4	52.6						5.8	0.16	3.84	1.76				14,390	
		612A3a	2	3	2	2	0.5	27.3	22.9	49.3					36.5	0.47	35.73	0.27					56
		3			3			27.4	23.0	49.6					36.6	0.47	35.90	0.27					
					4			54.4	45.6						72.6	0.93	71.17	0.53					
		612A3	2	3	2	11	6.6	37.3	43.1	13.0					4.7	0.03	3.26	1.38				11,530	56
		4			3			39.9	46.2	13.9					5.0	0.03	3.49	1.48				12,350	
					4			46.3	53.7						5.8	0.03	4.05	1.72				14,340	
		612A1-3	2	3	2	33	7.0	39.0	44.7	9.3					5.1	0.09	3.53	1.50				12,000	56
		9*			3			41.9	48.1	10.0					5.5	0.10	3.80	1.61				12,910	
					4			46.6	53.4						6.1	0.11	4.22	1.79				14,340	
		612B1	2	3	2	13	6.6	33.8	40.8	18.8					8.6	0.15	7.02	1.43				10,440	56
		1			3			36.2	43.7	20.1					9.2	0.15	7.51	1.53				11,170	
					4			45.3	54.7						11.5	0.19	9.40	1.91				13,980	
		612B2	2	3	2	15	6.6	40.3	46.3	6.8					5.4	0.05	3.81	1.58				12,420	56
		2			3			43.1	49.6	7.3					5.8	0.05	4.07	1.69				13,300	
					4			46.5	53.5						6.3	0.05	4.39	1.82				14,350	
		612B3	2	3	2	10	6.9	33.4	40.2	19.5					8.3	0.16	7.09	1.08				10,270	56
		3			3			35.9	43.2	20.9					8.9	0.17	7.60	1.17				11,030	
					4			45.4	54.6						11.3	0.21	9.63	1.46				13,950	
		612B1-3	2	3	2	38	6.7	36.3	42.8	14.2					7.3	0.11	5.77	1.39				11,180	56
		9*			3			38.8	45.9	15.3					7.8	0.11	6.17	1.49				11,973	
					4			45.8	54.2						9.4	0.13	7.48	1.75				14,120	
Vinton	Brown	629	3	3	2	19	6.5	40.2	40.9	12.4	5.3	62.6	1.3	14.3	4.1	0.05	3.55	0.51				11,540	59
		X			3			43.0	43.7	13.3	4.9	66.9	1.4	9.1	4.4	0.05	3.80	0.55				12,340	
					4			49.6	50.4		5.6	77.2	1.6	10.5	5.1	0.06	4.38	0.63				14,230	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LOWER KITTANNING (NO. 5) COAL (continued)																								
Vinton (continued)	Clinton	631A	2	3	2*	29	7.9	38.3	41.4	12.4					4.6								11,160	60
					3			41.6	44.9	13.5					5.0								12,120	
					4			48.1	51.9						5.8								14,000	
		631B1	2	3	2	13	4.7	42.0	43.9	9.4					4.5								12,240	60
		1			3			44.1	46.1	9.8					4.8								12,850	
					4			48.9	51.1						5.3								14,250	
		631B2	2	3	2	22	2.3	35.7	40.9	21.1					5.5								10,600	60
		2			3			36.5	41.9	21.6					5.6								10,850	
					4			46.6	53.4						7.1								13,840	
		631B1,2	2	3	2*	35	7.4	36.5	40.7	15.4					4.8								10,800	60
		9			3			39.4	44.0	16.6					5.1								11,390	
					4			47.2	52.8						6.1								13,980	
		631B1,2	2	3	2	35	3.2	38.0	42.0	16.8					5.1								11,210	60
		9*			3			39.3	43.4	17.3					5.3								11,580	
					4			47.5	52.5						6.4								13,400	
		631C1	2	3	2	9	3.2	43.3	48.4	5.1					2.4								13,050	60
		1			3			44.7	50.0	5.3					2.5								13,480	
					4			47.2	52.8						2.6								14,230	
		631C2	2	3	2	17	3.7	40.8	49.4	6.1					3.3								12,620	60
		2			3			42.4	51.3	6.3					3.4								13,100	
					4			45.3	54.7						3.6								13,990	
		631C3	2	3	2	10	3.1	38.9	46.1	11.9					4.1								11,930	60
		3			3			40.1	47.6	12.3					4.2								12,310	
					4			45.8	54.2						4.8								14,040	
		631C1-3	2	3	2*	36	8.7	38.7	45.8	6.8					3.0								11,880	60
		9			3			42.4	50.2	7.4					3.2								13,010	
					4			45.8	54.2						3.5								14,050	
		631C1-3	2	3	2	36	3.4	40.9	48.2	7.5					3.3								12,530	60
		9*			3			42.3	49.9	7.8					3.4								12,970	
					4			45.9	54.1						3.7								14,060	
Washington	Salem	708	3	3	1	46	2.0	38.4	50.9	8.7	5.1	74.2	1.5	8.9	1.6	0.02	1.06	0.51	2560	2610	2640		13,340	70
		X			3			39.2	51.9	8.9	5.2	75.7	1.5	7.1	1.6	0.02	1.08	0.52					13,600	
					4			43.0	57.0		5.7	83.1	1.7	7.7	1.8	0.02	1.18	0.57					14,930	
		709	3	3	1	41	2.0	37.8	47.3	12.9	4.7	68.1	1.3	7.8	5.2	0.09	4.18	0.94	2040	2120	2240		12,610	70
		X			3			38.6	48.3	13.1	4.8	69.5	1.4	5.9	5.3	0.09	4.27	0.96					12,870	
					4			44.4	55.6		5.5	80.0	1.6	6.8	6.1	0.10	4.90	1.10					14,820	

MIDDLE KITTANNING (NO. 6) COAL																									
Coshocton	Franklin	742A	1	1	2	37	4.9	42.5	47.5	5.1	5.6	71.6	1.3	12.9	3.5	0.30	1.22	2.00	1980	2030	2080	4	12,880	76
		1			3			44.7	49.9	5.4	5.3	75.4	1.4	8.8	3.7	0.31	1.28	2.10					13,540	
					4			47.3	52.7		5.6	79.7	1.5	9.3	3.9	0.33	1.36	2.22					14,320	
		742B	1	1	2	11	5.0	37.4	37.7	19.9	4.6	54.5	0.9	13.4	6.7	0.22	3.20	3.25	2030	2080	2140	2	9,980	76
		2			3			39.4	39.7	20.9	4.3	57.3	1.0	9.5	7.0	0.23	3.37	3.42					10,500	
					4			49.8	50.2		5.4	72.5	1.3	11.9	8.9	0.29	4.25	4.32					13,270	
		742A,B	1	1	2	48	4.9	41.3	45.3	8.5	5.4	67.7	1.2	13.0	4.2	0.28	1.67	2.28	1990	2040	2090		12,220	76
		9*			3			43.5	47.6	8.9	5.1	71.3	1.3	9.0	4.4	0.29	1.75	2.40					12,850	
					4			47.9	52.1		5.6	78.1	1.4	9.9	5.0	0.32	2.01	2.69					14,080	
		775A	1	1	2	12	5.2	37.8	40.1	16.9	4.8	57.2	1.0	11.2	8.9	0.96	5.19	2.72	1980	2030	2080	2½	10,510	76
		2			3			39.9	42.2	17.9	4.4	60.3	1.1	6.9	9.4	1.02	5.47	2.87					11,090	
					4			48.5	51.5		5.4	73.5	1.3	8.4	11.4	1.24	6.67	3.50					13,500	
		775B	1	1	2	37	2.7	43.4	47.6	6.3	5.4	70.5	1.2	12.3	4.3	0.03	2.11	2.16	2140	2190	2280	4½	12,880	76
		1			3			44.6	48.9	6.5	5.2	72.5	1.3	10.1	4.4	0.03	2.16	2.22					13,240	
					4			47.7	52.3		5.6	77.5	1.4	10.8	4.7	0.03	2.31	2.37					14,150	
		775A,B	1	1	2	49	3.3	42.0	45.8	8.9	5.3	67.2	1.2	12.0	5.4	0.25	2.86	2.24	2100	2150	2230		12,300	76
		9*			3			43.4	47.3	9.3	5.0	69.5	1.3	9.3	5.6	0.27	2.96	2.37					12,720	
					4			47.9	52.1		5.6	76.5	1.4	10.2	6.3	0.32	3.37	2.64					13,990	
	Linton	781A	1	1	2	26	4.4	42.6	46.4	6.6	5.5	69.0	1.3	14.1	3.5	0.49	1.30	1.67	2030	2080	2140	4	12,580	76
		1			3			44.6	48.5	6.9	5.3	72.1	1.4	10.7	3.6	0.51	1.36	1.75					13,160	
					4			47.9	52.1		5.6	77.5	1.5	11.5	3.9	0.55	1.46	1.87					14,140	
		781B	1	1	2	12	4.5	43.9	49.1	2.5	5.8	73.3	1.4	14.7	2.3	0.09	0.97	1.27	2200	2250		4	13,350	76
		2			3			45.9	51.5	2.6	5.6	76.7	1.5	11.2	2.4	0.09	1.02	1.34					13,980	
					4			47.2	52.8		5.7	78.8	1.5	11.5	2.5	0.10	1.04	1.37					14,350	
		781C	1	1	2	7	7.1	34.9	39.5	18.5	4.8	55.4	1.0	13.8	6.5	0.86	3.84	1.79	2030	2080	2180	2	10,030	76
		3			3			37.6	42.5	19.9	4.3	59.6	1.1	8.1	7.0	0.93	4.13	1.92					10,790	
					4			46.9	53.1		5.3	74.4	1.3	10.3	8.7	1.16	5.15	2.40					13,470	
		781A-C	1	1	2	45	4.8	41.8	46.1	7.3	5.5	68.1	1.3	14.2	3.6	0.43	1.59	1.57	2070	2120	2700		12,300	76
		9*			3			43.9	48.4	7.7	5.2	71.5	1.4	10.4	3.8	0.45	1.67	1.65					13,020	
					4			47.6	52.4		5.6	77.5	1.5	11.3	4.1	0.48	1.82	1.80					14,090	
		782A	1	1	1	24	4.0	44.8	45.9	5.3	5.7	70.5	1.3	13.2	4.0	0.52	1.67	1.77	1980	2030	2080	6½	12,860	76
		1			3			46.7	47.7	5.6	5.5	73.4	1.3	10.1	4.1	0.54	1.74	1.84					13,390	
					4			49.4	50.6		5.8	77.8	1.4	10.6	4.4	0.57	1.84	1.95					14,180	
		782B	1	1	2	11	3.2	52.5	38.1	6.2	5.5	70.3	1.1	13.3	3.6	0.56	1.25	1.84	1920	2060	2115	4½	12,730	76
		2			3			54.3	39.3	6.4	5.3	72.6	1.2	10.7	3.8	0.58	1.29	1.90					13,150	
					4			58.0	42.0		5.7	77.6	1.3	11.4	4.0	0.62	1.38	2.03					14,050	
		782C	1	1	2	10	2.9	34.4	40.5	22.2	4.5	57.3	0.8	10.7	4.5	0.31	2.17	1.98	2470	2570	2655	2½	10,270	76
		3			3			35.4	41.7	22.9	4.3	59.0	0.8	8.4	4.6	0.32	2.23	2.04					10,580	
					4			45.9	54.1		5.6	76.5	1.0	11.0	5.9	0.41	2.89	2.64					13,710	
		782A-C	1	1	2	45	3.6	44.2	42.7	9.5	5.4	67.4	1.1	12.6	4.0	0.48	1.68	1.83	2080	2160	2220		12,230	76
		9*			3			45.9	44.3	9.8	5.2	69.8	1.2	9.9	4.1	0.49	1.74	1.90					12,680	
					4			50.7	49.3		5.7	77.6	1.3	10.8	4.6	0.54	1.97	2.13					14,040	
	Virginia	739	1	1	2	49	5.7	42.2	41.9	10.2	5.4	65.8	1.1	12.2	5.3	0.28	2.96	2.05	2030	2080	2140	4½	11,950	76
		X			3			44.7	44.5	10.8	5.0	69.8	1.2	7.6	5.6	0.29	3.14	2.17					12,670	
					4			50.1	49.9		5.6	78.2	1.3	8.6	6.3	0.33	3.52	2.43					14,200	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MIDDLE KITTANNING (NO. 6) COAL (continued)																								
Coshocton (continued)	Virginia (continued)	740A	2	1	2	20	5.5	42.5	46.9	5.1	5.4	71.2	1.3	13.1	3.9	0.01	1.76	2.13	2020	2070	2120	4	12,800	76
		1			3			44.9	49.7	5.4	5.1	75.4	1.4	8.6	4.1	0.01	1.86	2.26					13,540	
					4			47.5	52.5		5.4	79.6	1.4	9.2	4.4	0.01	1.96	2.38					14,310	
		740B	2	1	2	12	5.4	45.6	45.6	3.4	5.8	72.9	1.3	12.9	3.7	0.09	1.16	2.47	2150	2200	2250	3½	13,130	76
		2			3			48.2	48.2	3.6	5.5	77.1	1.4	8.5	3.9	0.09	1.23	2.61					13,880	
					4			50.0	50.0		5.7	79.9	1.4	8.9	4.1	0.10	1.28	2.70					14,440	
		740C	2	1	2	10	5.9	32.8	34.6	26.7	4.3	49.8	0.9	11.6	6.7	0.51	4.06	2.14	2180	2240	2300	2½	9,070	76
		3			3			34.9	36.8	28.3	3.8	52.9	0.9	7.0	7.1	0.54	4.31	2.27					9,640	
					4			48.7	51.3		5.3	73.8	1.3	9.7	9.9	0.76	6.01	3.17					13,450	
		740A-C	2	1	2	42	5.6	41.0	43.5	9.9	5.2	66.5	1.2	12.7	4.5	0.15	2.15	2.22	2090	2150	2200		11,980	76
		9*			3			43.4	46.1	10.5	4.9	70.3	1.3	8.2	4.8	0.16	2.29	2.36					12,680	
					4			48.5	51.5		5.5	78.3	1.4	9.2	5.6	0.21	2.75	2.66					14,140	
Guernsey	Liberty	628A	3	3	2	38	2.4	41.6	47.2	8.8					5.8								12,700	59
		X			3			42.6	48.4	9.0					5.9								13,010	
					4			46.8	53.2						6.5								14,300	
		628B	3	3	2	29	2.6	41.3	45.9	10.2					7.5								12,100	59
		X			3			42.4	47.1	10.5					7.7								12,420	
					4			47.4	52.6						8.6								13,880	
		628C	3	3	2	15	2.4	43.0	47.4	7.2					3.6								12,920	59
		X			3			44.1	48.5	7.4					3.7								13,240	
					4			47.6	52.4						4.0								14,290	
		628D	3	3	2	41	2.9	42.9	47.6	6.6					3.2								13,180	59
		X			3			44.2	49.0	6.8					3.3								13,570	
					4			47.4	52.6						3.5								14,560	
		628E	3	3	2	34	2.6	43.5	48.3	5.6					3.4								13,330	59
		X			3			44.7	49.6	5.7					3.5								13,690	
					4			47.4	52.6						3.7								14,520	
		628F	3	3	2	16*	2.5	36.2	45.1	16.2					6.5								11,470	59
		X			3			37.1	46.3	16.6					6.7								11,760	
					4			44.5	55.5						8.0								14,110	
Holmes	Walnut Creek	613-1	2	3	2	11	3.1	40.9	51.9	4.1					2.3	0.05	1.40	0.82					13,380	56
		1			3			42.2	53.6	4.2					2.3	0.05	1.44	0.85					13,810	
					4			44.1	55.9						2.4	0.05	1.50	0.89					14,420	
		613-2	2	3	2	12	2.9	41.3	52.2	3.6					1.6	0.06	0.95	0.57					13,610	56
		2			3			42.5	53.8	3.7					1.6	0.06	0.98	0.59					14,020	
					4			44.1	55.9						1.7	0.06	1.02	0.60					14,560	
		613-3	2	3	2	8	2.3	40.9	52.3	4.5					1.7	0.01	1.22	0.52					13,630	56
		3			3			41.9	53.5	4.6					1.8	0.02	1.25	0.52					13,950	
					4			43.9	56.1						1.9	0.02	1.30	0.55					14,620	

		613-1-3	2	3	2	31	2.8	41.1	52.1	4.0					1.9	0.04	1.18	0.64					13,530	56
		9*			3			42.3	53.6	4.1					1.9	0.04	1.21	0.65					13,920	
					4			44.1	55.9						2.0	0.04	1.26	0.68					14,520	
Monroe	Franklin	701	3	3	1	52	1.9	38.2	49.8	10.1	4.9	72.7	1.4	7.7	3.2	0.07	2.64	0.52	2040	2140	2320		13,160	70
		X			3			39.0	50.7	10.3	5.0	74.1	1.4	5.9	3.3	0.07	2.69	0.53					13,420	
					4			43.5	56.5		5.6	82.6	1.6	6.5	3.7	0.07	2.99	0.61					14,950	
	Malaga	700	3	3	1	47	1.6	39.0	48.5	10.9	5.0	72.0	1.4	7.2	3.5	0.02	2.92	0.60	2070	2180	2340		13,150	70
		X			3			39.6	49.3	11.1	5.0	73.2	1.4	5.7	3.6	0.02	2.97	0.61					13,360	
					4			44.6	55.4		5.7	82.3	1.6	6.4	4.0	0.02	3.34	0.69					15,030	
Morgan	Center	694	3	3	1	32	1.5	44.3	44.7	9.5					5.2	0.01	4.42	0.80					13,130	70
		X			3			44.9	45.4	9.7					5.3	0.01	4.49	0.81					13,330	
					4			49.7	50.3						5.9	0.01	4.97	0.89					14,750	
Muskingum	Adams	743A	1	1	2	25	5.1	45.8	45.9	3.2	5.8	73.5	1.4	13.2	2.9	0.07	1.25	1.59	1950	2000	2110	4	13,320	76
		1			3			48.2	48.5	3.3	5.5	77.4	1.5	9.2	3.1	0.07	1.32	1.67					14,040	
					4			49.9	50.1		5.7	80.0	1.5	9.6	3.2	0.08	1.36	1.73					14,520	
		743B	1	1	2	12	4.4	42.9	41.3	11.4	5.1	62.4	1.2	10.9	9.0	1.03	5.24	2.72	2150	2200	2250	3½	11,730	76
		2			3			44.9	43.2	11.9	4.8	65.3	1.3	7.3	9.4	1.08	5.49	2.85					12,260	
					4			51.0	49.0		5.5	74.1	1.4	8.3	10.7	1.23	6.23	3.23					13,920	
		743A,B	1	1	2	37	4.9	44.8	44.4	5.9	5.6	69.9	1.3	12.4	4.9	0.38	2.55	1.95	2010	2060	2160		12,800	76
		9*			3			47.1	46.8	6.1	5.3	73.4	1.4	8.6	5.2	0.40	2.68	2.08					13,460	
					4			50.3	49.7		5.6	78.1	1.5	9.2	5.6	0.45	2.95	2.22					14,320	
		743C	1	1	2	6	5.2	19.2	17.4	58.2	2.9	26.8	0.5	11.0	0.6	0.03	0.14	0.43	2730	2790	2890	0	4,490	76
		3			3			20.2	18.5	61.3	2.4	28.3	0.6	6.8	0.6	0.03	0.15	0.45					4,730	
					4			52.5	47.5		6.4	73.2	1.4	17.4	1.6	0.08	0.38	1.17					12,270	
		743D	1	1	2	4	5.0	32.8	40.0	22.2	4.5	58.0	1.1	12.2	2.0	0.11	1.16	0.72	2130	2180	2240	1	10,200	76
		4			3			34.6	42.1	23.3	4.1	61.1	1.1	8.3	2.1	0.11	1.22	0.76					10,730	
					4			45.1	54.9		5.4	79.6	1.5	10.8	2.7	0.15	1.59	0.99					14,000	
		743A-D	1	1	2	47	4.9	40.6	40.6	13.9	5.1	63.4	1.2	12.3	4.1	0.31	2.13	1.66	2120	2170	2260		11,520	76
		9*			3			42.7	42.7	14.6	4.8	66.7	1.3	8.3	4.3	0.32	2.24	1.74					12,110	
					4			50.0	50.0		5.6	78.1	1.5	9.8	5.0	0.38	2.62	2.04					14,190	
	Monroe	744	1	1	2	40	5.3	41.9	42.7	10.1	5.4	67.5	1.3	11.8	3.9	0.34	2.27	1.31	2130	2190	2320	3	12,120	76
		X			3			44.2	45.1	10.7	5.1	71.2	1.3	7.6	4.1	0.35	2.40	1.38					12,790	
					4			49.5	50.5		5.7	79.7	1.5	8.5	4.6	0.40	2.69	1.54					14,320	
	Washington	801A	1	1	2	26	5.0	40.8	50.6	3.6	5.8	73.3	1.1	14.1	2.2	0.19	0.76	1.21	1920	1970	2020	4	13,020	76
		1			3			42.9	53.3	3.8	5.5	77.1	1.1	10.2	2.3	0.20	0.79	1.26					13,700	
					4			44.6	55.4		5.7	80.2	1.2	10.6	2.3	0.21	0.83	1.31					14,250	
		801B	1	1	2	8	4.3	36.3	40.0	19.4	4.7	56.1	1.0	12.9	5.9	0.76	2.36	2.83	1890	2180	2360	2½	10,350	76
		2			3			37.9	41.9	20.2	4.4	58.7	1.0	9.5	6.2	0.79	2.46	2.95					10,820	
					4			47.5	52.5		5.5	73.5	1.3	11.9	7.8	0.99	3.09	3.70					13,570	
		801A,B	1	1	2	34	4.8	39.7	48.0	7.5	5.5	69.1	1.1	13.8	3.1	0.33	1.15	1.60	1910	2020	2100		12,360	76
		9*			3			41.7	50.5	7.8	5.2	72.6	1.1	10.0	3.2	0.34	1.20	1.67					12,990	
					4			45.3	54.7		5.7	78.5	1.2	10.9	3.7	0.40	1.38	1.89					14,080	
		802A	1	1	2	17	5.0	42.1	46.5	6.4	5.3	67.7	1.0	14.6	5.0	0.94	2.34	1.69	2320	2370	2440	3½	12,250	76
		1			3			44.3	49.0	6.7	5.0	71.3	1.1	10.7	5.2	0.99	2.46	1.78					12,900	
					4			47.6	52.4		5.4	76.4	1.2	11.4	5.6	1.06	2.64	1.91					13,840	
		802B	1	1	2	8	5.3	41.4	46.9	6.4	5.7	71.1	1.1	13.7	2.0	0.26	0.46	1.32	2050	2250	2410	3½	12,600	76
		2			3			43.7	49.6	6.7	5.4	75.0	1.2	9.6	2.1	0.27	0.48	1.39					13,300	
					4			46.8	53.2		5.8	80.5	1.3	10.1	2.3	0.29	0.52	1.49					14,260	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MIDDLE KITTANNING (NO. 6) COAL (continued)																								
Muskingum (continued)	Washington (continued)	802C	1	1	2	7	4.7	32.8	33.0	29.5	4.2	48.3	0.7	11.9	5.4	0.69	3.43	1.29	2140	2240	2460	1½	8,790	76
		3			3			34.4	34.7	30.9	3.8	50.6	0.8	8.2	5.7	0.72	3.60	1.36					9,210	
					4			49.7	50.3		5.5	73.3	1.1	11.9	8.2	1.04	5.21	1.96					13,340	
		802A-C	1	1	2	32	5.0	39.9	43.7	11.4	5.1	64.4	1.0	13.8	4.3	0.70	2.08	1.50	2210	2310	2440		11,600	76
		9*			3			42.0	46.1	11.9	4.8	67.8	1.1	9.9	4.5	0.74	2.18	1.58					12,210	
					4			47.8	52.2		5.5	76.8	1.2	11.2	5.3	0.85	2.63	1.81					13,840	
Noble	Brookfield	706	3	3	1	43	2.8	40.5	46.3	10.4	4.8	69.0	1.3	10.1	4.4	0.22	2.84	1.31	2160	2270	2410		12,670	70
		X			3			41.6	47.7	10.7	5.0	71.0	1.3	7.5	4.5	0.23	2.92	1.35					13,040	
					4			46.6	53.4		5.6	79.5	1.5	8.4	5.0	0.25	3.27	1.52					14,600	
	Elk	771	3	1	2	40	3.0	34.4	48.4	14.2	5.0	68.7	1.3	8.3	2.5	0.10	2.06	0.35	2090	2140	2240	4	12,330	76
		X			3			35.5	49.9	14.6	4.8	70.7	1.3	6.0	2.6	0.10	2.12	0.36					12,700	
					4			41.6	58.4		5.6	82.9	1.5	7.0	3.0	0.12	2.48	0.42					14,880	
		774	3	1	2	47	3.4	36.9	50.1	9.6	5.2	71.6	1.3	8.7	3.6	0.01	3.11	0.51	2080	2130	2180	5½	12,950	76
		X			3			38.2	51.8	10.0	5.0	74.1	1.3	5.8	3.8	0.01	3.22	0.53					13,410	
					4			42.5	57.5		5.6	82.4	1.5	6.3	4.2	0.01	3.58	0.59					14,900	
	Jackson	704	3	3	1	47	1.9	40.7	46.9	10.5	5.0	71.9	1.3	8.2	3.1	0.03	2.67	0.37	2080	2120	2310		13,070	70
		X			3			41.5	47.8	10.7	5.1	73.3	1.4	6.4	3.1	0.03	2.72	0.38					13,320	
					4			46.4	53.6		5.7	82.1	1.5	7.2	3.5	0.03	3.04	0.43					14,910	
Perry	Bearfield	783A	1	1	2	13										no analysis received								76
		1																						
		783B	1	1	2	9	2.6	34.4	40.3	22.7	4.5	57.9	1.0	11.7	2.2	0.01	1.27	0.92	2630	2680	2880	1½	10,280	76
		2			3			35.3	41.4	23.3	4.4	59.5	1.1	9.4	2.3	0.01	1.30	0.94					10,560	
					4			46.0	54.0		5.7	77.6	1.4	12.4	2.9	0.01	1.70	1.23					13,770	
		783C	1	1	2	28	6.4	39.9	47.0	6.7	5.6	68.0	1.3	16.3	2.1	0.15	1.26	0.67	2080	2130	2190	2	12,190	76
		3			3			42.7	50.1	7.2	5.9	72.7	1.4	10.6	2.2	0.16	1.35	0.72					13,030	
					4			46.0	54.0		5.6	78.3	1.5	12.2	2.4	0.16	1.45	0.78					14,040	
	Pike	741	1	1	2	56	6.4	33.7	39.0	20.9	4.6	55.4	1.0	12.2	5.9	0.21	4.53	1.21	2080	2130	2180	1	10,040	76
		X			3			36.1	41.6	22.3	4.2	59.2	1.1	6.8	6.4	0.22	4.84	1.30					10,730	
					4			46.4	53.6		5.4	76.2	1.4	8.8	8.2	0.29	6.23	1.67					13,810	
		776A	1	1	2	14	5.8	30.8	35.6	27.8	4.3	51.7	0.9	13.2	2.1	0.21	0.98	0.93	2600	2650	2850	½	9,110	76
		1			3			32.6	38.0	29.4	3.9	54.8	1.0	8.7	2.2	0.22	1.03	0.89					9,650	
					4			46.2	53.8		5.6	77.5	1.4	12.3	3.2	0.31	1.46	1.39					13,660	
		776B	1	1	2	8	6.7	36.0	49.0	8.3	5.4	66.2	1.1	16.5	2.6	0.18	1.29	1.10	2430	2550	2715	1½	11,830	76
		2			3			38.6	52.5	8.9	4.9	71.0	1.2	11.3	2.7	0.19	1.37	1.17					12,680	
					4			42.4	57.6		5.4	77.9	1.3	12.4	3.0	0.21	1.50	1.28					13,920	
		776C	1	1	2	11	4.1	37.6	46.6	11.7	5.0	65.4	1.2	13.5	3.2	0.01	2.09	1.12	2180	2280	2380	1½	11,730	76
		3			3			39.3	48.5	12.2	4.8	68.2	1.3	10.1	3.3	0.01	2.16	1.16					12,240	
					4			44.7	55.3		5.4	77.7	1.4	11.7	3.8	0.01	2.49	1.33					13,930	

		776D	1	1	2	16	6.6	40.2	45.5	7.7	5.3	64.9	1.3	15.3	5.5	0.53	3.14	1.88	2140	2190	2280	2½	11,810	76
		4			3			43.1	48.6	8.3	4.9	69.5	1.4	10.0	5.9	0.57	3.37	2.01					12,650	
					4			46.9	53.1		5.4	75.8	1.5	10.8	6.5	0.62	3.67	2.19					13,790	
		776A-D	1	1	2	49	5.8	36.2	43.4	14.6	4.9	61.4	1.1	14.5	3.5	0.26	1.96	1.30	2330	2400	2540		11,020	76
		9*			3			38.3	46.3	15.4	4.6	65.2	1.2	9.9	3.7	0.27	2.08	1.37					11,690	
					4			45.5	54.5		5.5	77.1	1.4	11.7	4.3	0.32	2.39	1.61					13,800	
	Pleasant	777A	1	1	2	10	8.0	30.6	41.6	19.8	4.6	55.6	1.0	15.2	3.8	0.31	2.89	0.59	2060	2110	2160	1½	9,890	76
		1			3			33.3	45.2	21.5	4.0	60.4	1.1	8.9	4.1	0.34	3.14	0.64					10,750	
					4			42.4	57.6		5.1	77.0	1.4	11.3	5.2	0.43	4.00	0.82					13,700	
		777B	1	1	2	18	6.8	32.6	37.3	23.3	4.7	53.2	1.0	15.5	2.3	0.34	0.93	1.00	2530	2630	2840	3½	9,490	76
		2			3			34.9	40.1	25.0	4.3	57.0	1.0	10.3	2.4	0.37	0.99	1.08					10,180	
					4			46.5	53.5		5.7	76.0	1.4	13.6	3.3	0.49	1.32	1.44					13,570	
		777C	1	1	2	7	6.8	38.6	37.5	17.1	5.1	59.5	1.1	14.2	3.0	0.10	2.03	0.88	2460	2520	2620	1½	10,650	76
		3			3			41.4	40.2	18.4	4.7	63.9	1.2	8.6	3.2	0.11	2.17	0.95					11,430	
					4			50.8	49.2		5.7	78.3	1.5	10.5	4.0	0.13	2.67	1.16					14,010	
		777D	1	1	2	22	8.3	42.0	44.0	5.7	5.7	69.3	1.3	15.1	2.9	0.12	2.25	0.52	2020	2120	2220	3½	12,340	76
		4			3			45.7	48.1	6.2	5.2	75.5	1.4	8.6	3.1	0.13	2.45	0.57					13,450	
					4			48.8	51.2		5.5	80.5	1.5	9.1	3.4	0.14	2.62	0.60					14,340	
		777E(A-D)	1	1	2	57	7.2	34.6	42.5	15.7	5.0	60.3	1.1	14.0	3.9	0.17	2.95	0.74	2080	2140	2190	1	10,820	76
		9			3			37.2	45.9	16.9	4.5	65.0	1.2	8.3	4.1	0.18	3.17	0.80					11,650	
					4			44.8	55.2		5.5	78.2	1.5	9.8	5.0	0.22	3.82	0.96					14,030	
		777A-D	1	1	2	57	7.6	36.6	40.7	15.1	5.1	60.7	1.1	15.1	2.9	0.22	1.93	0.72	2240	2320	2450		10,810	76
		9*			3			39.6	44.2	16.2	4.6	65.7	1.2	9.2	3.1	0.23	2.09	0.78					11,710	
					4			47.2	52.8		5.5	78.2	1.5	11.1	3.7	0.29	2.48	0.96					13,950	
Vinton	Brown	625A1	1	3	2	6	4.7	39.6	45.7	10.0					3.3	0.21	2.47	0.65						58
		1			3			41.6	47.9	10.5					3.5	0.22	2.59	0.68						
					4			46.4	53.6						3.9	0.25	2.89	0.76						
		625A2	1	3	2	1	2.0	11.8	7.5	78.7					0.4	0.15	0.15	0.08						58
		2			3			12.0	7.7	80.3					0.4	0.15	0.15	0.09						
					4			61.1	38.9						2.0	0.78	0.78	0.41						
		625A3	1	3	2	13	4.2	42.1	48.0	5.7					2.3	0.21	1.30	0.77						58
		3			3			43.9	50.1	6.0					2.4	0.22	1.36	0.80						
					4			46.7	53.3						2.5	0.23	1.44	0.86						
		625A4	1	3	2	15	3.8	40.1	41.0	15.1					3.9	0.34	2.77	0.75						58
		4			3			41.7	42.6	15.7					4.0	0.35	2.88	0.78						
					4			49.4	50.6						4.8	0.42	3.42	0.92						
		625A5	1	3	2	5	2.0	14.9	17.5	65.6					3.4	0.56	2.80	0.00						58
		5			3			15.2	17.9	66.9					3.4	0.57	2.86	0.00						
					4			46.0	54.0						10.4	1.73	8.64	0.00						
		625A1-5	1	3	2	40	3.8	36.8	40.2	19.2					3.1	0.30	2.18	0.63						58
		9*			3			38.3	41.8	19.9					3.2	0.31	2.27	0.65						
					4			47.8	52.2						4.0	0.39	2.82	0.81						
		625A1,3,4	1	3	2	34	2.9	42.1	46.8	8.2	5.4	69.7	1.3	12.2	3.2	0.18	2.29	0.71					12,730	58
		9			3			43.4	48.2	8.4	5.2	71.8	1.4	9.9	3.3	0.19	2.36	0.73					13,110	
					4			47.4	52.6		5.7	78.4	1.5	10.8	3.6	0.20	2.58	0.80					14,320	
		625B1	1	3	2	7	4.1	39.8	45.4	10.7					3.5	0.21	3.02	0.31						58
		1			3			41.5	47.3	11.2					3.7	0.22	3.15	0.32						
					4			46.7	53.3						4.1	0.25	3.54	0.36						

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
MIDDLE KITTANNING (NO. 6) COAL (continued)																								
Vinton (continued)	Brown (continued)	625B2	1	3	2	1	2.1	10.2	2.8	84.9					0.3	0.18	0.03	0.07						58
		2			3			10.4	2.9	86.7					0.3	0.19	0.03	0.07						
					4			78.5	21.5						2.1	1.38	0.23	0.54						
		625B3	1	3	2	12	3.8	46.8	45.3	4.1					2.2	0.10	1.31	0.76						58
		3			3			48.6	47.1	4.3					2.2	0.10	1.36	0.79						
					4			50.8	49.2						2.4	0.11	1.42	0.83						
		625B4	1	3	2	12	3.3	41.6	43.6	11.5					4.7	0.28	3.80	0.58						58
		4			3			43.0	45.1	11.9					4.8	0.29	3.93	0.60						
					4			48.8	51.2						5.5	0.33	4.46	0.68						
		625B5	1	3	2	2	2.1	14.1	12.9	70.9					2.5	0.72	1.67	0.10						58
		5			3			14.4	13.2	72.4					2.5	0.74	1.71	0.10						
					4			52.2	47.8						9.2	2.67	6.18	0.37						
		625B1-5	1	3	2	34	3.5	40.1	41.2	15.1					3.3	0.23	2.51	0.54						58
		9*			3			41.5	42.7	15.8					3.4	0.24	2.60	0.56						
					4			49.3	50.7						4.0	0.28	3.08	0.66						
		625B1-5	1	3	2	34	3.7	40.2	41.8	14.3	5.0	63.8	1.1	12.5	3.3	0.22	2.42	0.68					11,600	58
		9			3			41.7	43.4	14.9	4.8	66.2	1.1	9.6	3.4	0.23	2.51	0.71					12,050	
					4			49.0	51.0		5.6	77.8	1.3	11.2	4.1	0.27	2.95	0.83					14,150	
		625C1	1	3	2	7	5.7	39.9	46.6	7.8					3.6	0.21	2.26	1.13						58
		1			3			42.3	49.4	8.3					3.8	0.22	2.40	1.20						
					4			46.1	53.9						4.2	0.24	2.61	1.31						
		625C2	1	3	2	1	1.8	16.9	15.1	66.2					0.8	0.13	0.46	0.22						58
		2			3			17.2	15.4	67.4					0.8	0.13	0.47	0.22						
					4			52.8	47.2						2.5	0.40	1.44	0.69						
		625C3	1	3	2	10	4.8	41.1	47.6	6.5					3.2	0.18	2.32	0.73						58
		3			3			43.2	50.0	6.8					3.4	0.19	2.44	0.76						
					4			46.3	53.7						3.6	0.20	2.62	0.82						
		625C4	1	3	2	11	4.0	43.7	45.2	7.1					3.8	0.23	2.95	0.65						58
		4			3			45.5	47.1	7.4					4.0	0.24	3.07	0.68						
					4			49.2	50.8						4.3	0.26	3.32	0.73						
		625C5	1	3	2	7	3.5	39.2	41.0	16.3					5.3	0.28	4.44	0.60						58
		5			3			40.6	42.5	16.9					5.5	0.29	4.60	0.62						
					4			48.9	51.1						6.6	0.35	5.53	0.75						
		625C6	1	3	2	4	1.9	19.1	28.4	50.6					5.1	0.40	4.45	0.26						58
		6			3			19.5	28.9	51.6					5.2	0.41	4.54	0.26						
					4			40.2	59.8						10.8	0.84	9.37	0.55						
		625C1-6	1	3	2	40	4.2	38.8	43.1	13.9					3.9	0.23	2.99	0.70						58
		9*			3			40.5	45.0	14.5					4.1	0.24	3.12	0.73						
					4			47.3	52.7						4.8	0.28	3.65	0.85						

		625C1-6	1	3	2	40	3.7	38.9	44.1	23.3	5.0	65.0	1.2	11.5	4.0	0.22	3.09	0.68					11,760	58
		9			3			40.4	45.8	13.8	4.8	67.5	1.3	8.5	4.1	0.23	3.21	0.70					12,210	
					4			46.9	53.1		5.5	78.3	1.5	9.9	4.8	0.27	3.72	0.82					14,170	
Washington	Liberty	770	3	1	2	49	3.3	38.8	48.5	9.4	5.2	71.3	1.3	8.5	4.3	0.03	3.38	0.92	2090	2140	2190	6	13,100	76
		X			3			40.1	50.1	9.8	5.0	73.7	1.3	5.7	4.5	0.03	3.50	0.95					13,550	
					4			44.5	55.5		5.6	81.7	1.5	6.2	5.0	0.03	3.87	1.05					15,020	
	Salem	707	3	3	1	42	1.9	37.8	48.1	12.2	4.8	69.8	1.3	8.5	3.4	0.06	2.72	0.66	2120	2280	2380		12,810	70
		X			3			38.5	49.0	12.5	4.8	71.2	1.3	6.7	3.5	0.06	2.77	0.68					13,070	
					4			44.0	56.0		5.5	81.4	1.5	7.6	4.0	0.06	3.16	0.78					14,930	
LOWER FREEPORT (NO. 6A) COAL																									
Gallia	Springfield	714	3	3	1	25	5.2	38.7	47.0	9.1					3.7	0.12	3.05	0.55					11,890	70
		X			3			40.8	49.6	9.6					3.9	0.13	3.21	0.58					12,540	
					4			45.2	54.8						4.3	0.14	3.56	0.64					13,880	
Harrison	Cadiz	736	1	1	2	44	3.5	39.4	48.7	8.4	5.4	71.9	1.5	9.5	3.3	0.17	2.52	0.57	1980	2030	2130	3½	13,050	76
		X			3			40.9	50.4	8.7	5.1	74.5	1.5	6.8	3.4	0.18	2.61	0.59					13,530	
					4			44.8	55.2		5.6	81.6	1.7	7.4	3.7	0.19	2.86	0.64					14,820	
		813	1	1	2	50	3.2	37.3	50.5	9.0	5.2	71.5	1.4	9.1	3.8	0.25	2.74	0.77	2020	2070	2120	5	12,740	76
		X			3			38.5	52.2	9.3	5.0	73.8	1.4	6.6	3.9	0.26	2.83	0.80					13,160	
					4			42.5	57.5		5.5	81.4	1.6	7.2	4.3	0.28	3.12	0.88					14,510	
	Greene	718	1	1	1	65	2.0	40.5	49.1	8.4	5.1	73.7	1.4	8.2	3.2				2090	2140	2190	4	13,260	76
		X			2		2.1	40.4	49.1	8.4	5.1	73.6	1.4	8.3	3.2	0.08	2.18	0.98					13,240	
					3			41.3	50.1	8.6	5.0	75.2	1.4	6.5	3.3	0.08	2.22	1.00					13,530	
					4			45.2	54.8		5.4	82.2	1.6	7.2	3.6	0.09	2.43	1.09					14,790	
		719	1	1	1	62	2.0	40.5	50.4	7.1	5.4	75.2	1.4	8.2	2.7				2130	2180	2240	4½	13,470	76
		X			2		2.2	40.5	50.2	7.1	5.4	75.0	1.4	8.5	2.6	0.07	1.67	0.91					13,450	
					3			41.4	51.4	7.2	5.3	76.7	1.5	6.6	2.7	0.07	1.70	0.93					13,750	
					4			44.6	55.4		5.6	82.7	1.6	7.2	2.9	0.08	1.84	1.00					14,820	
		720	1	1	1	61	2.1	37.9	50.9	9.1	5.4	72.4	1.2	8.9	3.0				2090	2140	2190	5½	13,150	76
		X			2		2.4	37.8	50.7	9.1	5.4	72.2	1.2	9.1	3.0	0.07	2.34	0.59					13,110	
					3			38.7	52.0	9.3	5.2	74.0	1.3	7.1	3.1	0.07	2.40	0.60					13,430	
					4			42.7	57.3		5.8	81.6	1.4	7.8	3.4	0.08	2.65	0.66					14,810	
		721	1	1	1	63	2.1	39.5	48.9	9.5	5.2	72.5	1.4	8.2	3.2				2110	2120	2230	5	13,010	76
		X			2		2.3	39.4	48.8	9.5	5.2	72.4	1.4	8.3	3.2	0.08	2.47	0.69					12,990	
					3			40.3	50.0	9.7	5.1	74.0	1.4	6.5	3.3	0.08	2.52	0.70					13,290	
					4			44.7	55.3		5.6	82.0	1.6	7.1	3.7	0.09	2.79	0.78					14,710	
		809	1	1	2	74	3.3	36.8	53.2	6.7	5.4	74.6	1.5	9.9	1.9	0.05	1.00	0.81	2100	2150	2200	6	13,290	76
					3			38.0	55.1	6.9	5.2	77.1	1.6	7.3	1.9	0.05	1.03	0.84					13,740	
					4			40.8	59.2		5.6	82.8	1.7	7.8	2.1	0.05	1.11	0.90					14,750	
		810	1	1	2	71	3.1	35.7	53.3	7.9	5.2	73.3	1.5	9.9	2.2	0.10	1.32	0.75	2140	2190	2310	6	13,090	76
		X			3			36.9	55.0	8.1	5.0	75.7	1.6	7.4	2.2	0.10	1.36	0.78					13,520	
					4			40.2	59.8		5.5	82.4	1.7	8.0	2.4	0.10	1.48	0.85					14,710	
		811A	1	1	2	34	3.3	37.5	50.1	9.1	5.2	72.0	1.4	8.9	3.4	0.19	2.07	1.18	2090	2140	2190	6½	12,760	76
		1			3			38.8	51.8	9.4	5.0	74.4	1.4	6.3	3.5	0.19	2.14	1.22					13,190	
					4			42.8	57.2		5.5	82.2	1.5	6.9	3.9	0.21	2.36	1.34					14,560	
		811B	1	1	2	40	2.2	33.8	44.8	19.2	4.7	63.7	1.3	9.0	2.1	0.07	1.25	0.73	2460	2520	2620	6	11,430	76
		2			3			34.6	45.7	19.7	4.5	65.1	1.3	7.3	2.1	0.07	1.28	0.74					11,690	
					4			43.1	56.9		5.6	81.1	1.6	9.1	2.6	0.09	1.60	0.92					14,550	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)				Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
LOWER FREEPORT (NO. 6A) COAL (continued)																								
Harrison (continued)	Greene (continued)	811A,B	1	1	2	74	2.7	35.5	47.2	14.6	4.9	67.5	1.3	9.0	2.7	0.12	1.62	0.93	2290	2340	2420		12,040	76
		9*			3			36.5	48.5	15.0	4.7	69.4	1.3	6.9	2.7	0.12	1.67	0.96					12,380	
					4			43.0	57.0		5.6	81.6	1.5	8.1	3.2	0.14	1.94	1.11					14,550	
		812A	1	1	2	32	3.1	35.3	51.8	9.8	5.2	71.8	1.4	8.8	3.0	0.12	1.71	1.19	2130	2180	2300	5	12,730	76
		1			3			36.4	53.5	10.1	5.0	74.1	1.4	6.3	3.1	0.12	1.76	1.23					13,130	
					4			40.5	59.5		5.5	82.5	1.6	6.9	3.5	0.14	1.96	1.37					14,610	
		812B	1	1	2	39	3.2	34.1	50.2	12.5	5.0	69.0	1.4	10.0	2.1	0.11	1.16	0.82	2140	2260	2380	6½	12,340	76
		2			3			35.3	51.8	12.9	4.8	71.3	1.5	7.3	2.2	0.11	1.20	0.85					12,740	
					4			40.5	59.5		5.5	81.9	1.7	8.4	2.5	0.13	1.38	0.98					14,630	
		812A,B	1	1	2	71	3.2	34.6	50.9	11.3	5.1	70.2	1.4	9.5	2.5	0.11	1.40	0.98	2130	2220	2340		12,520	76
		9*			3			35.7	52.6	11.7	4.9	72.5	1.4	6.9	2.6	0.11	1.45	1.02					12,920	
					4			40.5	59.5		5.5	82.1	1.7	7.8	2.9	0.13	1.64	1.15					14,620	
Jefferson	Salem	735	1	1	2	43	2.0	34.4	44.6	19.0	4.8	64.9	1.1	6.6	3.6	0.16	2.98	0.42	2120	2170	2270	6	11,620	76
		X			3			35.1	45.5	19.4	4.7	66.2	1.2	4.9	3.6	0.16	3.04	0.43					11,860	
					4			43.6	56.4		5.8	82.1	1.4	6.2	4.5	0.20	3.77	0.53					14,710	
		736A	1	1	2	39	2.0	37.8	46.7	13.5	5.0	68.8	1.3	6.9	4.5	0.20	3.89	0.42	1990	2040	2090	4½	12,400	76
		X			3			38.6	47.6	13.8	4.8	70.1	1.3	5.4	4.6	0.20	3.97	0.43					12,650	
					4			44.7	55.3		5.6	81.4	1.5	6.2	5.3	0.24	4.60	0.50					14,670	
Noble	Brookfield	693	3	3	1	30	1.8	39.8	45.6	12.8					5.3	0.02	4.32	0.92					12,500	70
		X			3			40.5	46.5	13.0					5.4	0.02	4.40	0.94					12,720	
					4			46.6	53.4						6.2	0.02	5.06	1.08					14,630	
UPPER FREEPORT (NO. 8) COAL																								
Harrison	Monroe	624A	2	3	2	7	4.5	30.7	52.7	12.1					2.9	0.26	2.04	0.59					9,969	58
		1			3			32.2	55.2	12.6					3.0	0.27	2.14	0.62					10,440	
					4			36.8	63.2						3.5	0.31	2.45	0.71					11,945	
		624B	2	3	2	7	4.6	34.3	49.0	12.1					1.4	0.17	0.69	0.56					12,070	58
		2			3			36.0	51.3	12.7					1.5	0.18	0.72	0.59					12,650	
					4			41.2	58.8						1.7	0.21	0.82	0.68					14,490	
		624C	2	3	2	30	4.6	38.4	49.9	7.1					1.6	0.13	0.92	0.52					12,920	58
		3			3			40.2	52.4	7.4					1.6	0.14	0.96	0.55					13,540	
					4			43.4	56.6						1.8	0.15	1.04	0.59					14,620	
		624A-C	2	3	2	44	5.1	34.9	48.0	12.0					1.8	0.22	1.01	0.54					11,900	58
		9			3			36.8	50.5	12.7					1.9	0.23	1.06	0.57					12,540	
					4			42.2	57.8						2.1	0.26	1.22	0.65					14,360	
		624A-C	2	3	2	44	4.6	36.5	50.2	8.7					1.7	0.15	1.06	0.54					12,310	58
		9*			3			38.2	52.7	9.1					1.8	0.16	1.10	0.56					12,480	
					4			42.0	58.0						2.0	0.18	1.22	0.62					14,170	

Muskingum	Washington	666	3	3	2	62	5.1	38.1	44.7	12.1					4.9								11,850	63
		X			3			40.1	47.1	12.8					5.2								12,500	
					4			46.0	54.0						5.9								14,330	
		667	3	3	2	68	5.3	39.9	45.7	9.1					3.9								12,320	63
		X			3			42.1	48.3	9.6					4.1								13,000	
					4			46.6	53.4						4.5								14,380	
		668	3	3	2	48	5.1	40.4	45.5	9.0					4.4								12,350	63
		X			3			42.6	48.0	9.4					4.6								13,020	
					4			47.0	53.0						5.1								14,380	
		669	3	3	2	26	5.5	36.9	42.9	14.7					8.2								11,280	63
		X			3			39.1	45.3	15.6					8.7								11,940	
					4			46.3	53.7						10.3								14,140	
		670	3	3	2	36	5.4	40.0	45.4	9.2					4.9								12,270	63
		X			3			42.3	48.0	9.7					5.2								12,970	
					4			46.8	53.2						5.7								14,370	
PITTSBURGH (NO. 8) COAL																									
Belmont	Kirkwood	738A	2	1	2	22	2.8	41.7	42.4	13.1	5.1	67.1	1.2	9.0	4.5	0.18	2.67	1.64	2030	2080	2130	5	12,090	76
		1			3			42.8	43.8	13.4	5.0	60.0	1.3	6.7	4.6	0.18	2.74	1.68					12,440	
					4			49.5	50.5		5.7	79.7	1.4	7.9	5.3	0.21	3.17	1.94					14,370	
		738B	2	1	2	10	3.0	41.3	45.8	9.9	5.3	70.2	1.3	10.3	3.0	0.08	1.60	1.34	2030	2080	2130	7½	12,530	76
		2			3			42.6	47.2	10.2	5.1	72.3	1.3	8.0	3.1	0.08	1.65	1.38					12,910	
					4			47.4	52.6		5.7	80.5	1.5	8.8	3.5	0.09	1.84	1.53					14,380	
		738C	2	1	2	18	2.7	39.7	41.6	16.0	5.0	64.2	1.1	8.8	4.9	0.17	3.91	0.85	2030	2080	2130	6	11,560	76
		3			3			40.8	42.8	16.4	4.8	66.0	1.1	6.6	5.1	0.17	4.02	0.87					11,890	
					4			48.8	51.2		5.8	79.0	1.4	7.7	6.1	0.21	4.81	1.05					14,220	
		738A-C	2	1	2	50	2.8	40.9	42.8	13.5	5.1	66.7	1.2	9.2	4.3	0.15	2.87	1.30	2030	2080	2130		12,000	76
		9*			3			42.1	44.0	13.9	4.9	68.7	1.2	6.9	4.4	0.15	2.95	1.33					12,350	
					4			48.8	51.2		5.7	79.7	1.4	8.0	5.2	0.17	3.45	1.55					14,340	
		786A	2	1	2	10	2.2	46.1	35.8	15.9	4.9	63.8	1.2	6.9	7.3	0.28	5.91	1.14	1980	2030	2090	5	11,760	76
		1			3			47.1	36.7	16.2	4.8	65.2	1.2	5.1	7.5	0.29	6.05	1.16					12,030	
					4			56.3	43.7		5.7	77.9	1.5	6.0	8.9	0.34	7.22	1.39					14,350	
		786B	2	1	2	7	1.9	43.3	35.5	19.3	4.9	61.4	1.2	9.0	4.2	0.16	2.69	1.35	2030	2080	2130	4	11,270	76
		2			3			44.1	36.3	19.6	4.8	62.6	1.2	7.5	4.3	0.16	2.74	1.38					11,490	
					4			54.9	45.1		6.0	77.8	1.5	9.4	5.3	0.20	3.41	1.71					14,290	
		786C	2	1	2	18	2.5	44.3	44.6	8.6	5.5	70.9	1.3	10.1	3.6	0.18	1.68	1.74	2030	2080	2130	6½	12,780	76
		3			3			45.4	45.8	8.8	5.3	72.7	1.3	8.2	3.7	0.18	1.73	1.74					13,100	
					4			49.7	50.3		5.8	79.7	1.4	9.0	4.1	0.20	1.89	1.96					14,360	
		786D	2	1	2	9	3.2	39.0	48.0	9.8	5.1	68.0	1.2	11.4	4.5	0.31	1.72	2.52	2000	2050	2100	5½	12,460	76
		4			3			40.3	49.6	10.1	4.9	70.2	1.2	8.9	4.7	0.32	1.77	2.60					12,860	
					4			44.8	55.2		5.4	78.1	1.3	10.0	5.2	0.35	1.97	2.90					14,310	
		786A-D	2	1	2	44	2.5	43.5	41.8	12.2	5.2	67.1	1.3	9.5	4.7	0.22	2.82	1.70	2010	2060	2110		12,230	76
		9*			3			44.6	42.9	12.5	5.0	68.8	1.3	7.5	4.9	0.23	2.89	1.74					12,540	
					4			51.0	49.0		5.8	78.7	1.4	8.6	5.5	0.25	3.31	1.99					14,340	
		795	2	1	2	50	2.7	41.9	45.5	9.9	5.3	68.4	1.2	10.8	4.4	0.37	1.78	2.25	2050	2080	2110	6	12,580	76
		X			3			43.1	46.7	10.2	5.1	70.3	1.2	8.7	4.5	0.38	1.83	2.31					12,940	
					4			48.0	52.0		5.7	78.3	1.3	9.7	5.0	0.42	2.04	2.57					14,410	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
PITTSBURGH (NO. 8) COAL (continued)																								
Belmont (continued)	Richland	794	2	1	2	54	1.7	38.2	46.2	13.9	4.9	67.9	1.2	9.5	2.6	0.01	1.20	1.44	2080	2130	2180	6½	12,120	76
		X			3			38.9	46.9	14.2	4.8	69.1	1.2	8.0	2.7	0.01	1.22	1.46					12,330	
					4			45.3	54.7		5.6	80.5	1.4	9.4	3.1	0.01	1.42	1.70					14,360	
		799A	1	1	2	14	2.0	41.3	49.5	7.2	5.4	72.4	1.1	10.0	3.9	0.16	2.23	1.52	1985	2060	2090	5	13,230	76
		1			3			42.2	50.5	7.3	5.3	73.9	1.1	8.4	4.0	0.16	2.27	1.55					13,500	
					4			45.5	54.5		5.7	79.7	1.2	9.1	4.3	0.18	2.45	1.67					14,570	
		799B	1	1	2	21	2.8	37.5	46.5	13.2	5.2	66.2	1.0	9.9	4.5	0.44	2.65	1.45	1895	1985	2095	6	12,090	76
		2			3			38.6	47.8	13.6	5.0	68.2	1.1	7.4	4.7	0.45	2.73	1.50					12,440	
					4			44.7	55.3		5.8	78.8	1.2	8.8	5.4	0.52	3.15	1.73					14,390	
		799C	1	1	2	10	2.0	39.8	49.6	8.6	5.4	70.8	1.1	8.7	5.4	0.32	2.46	2.50	1970	2040	2060	6	12,910	76
		3			3			40.6	50.6	8.8	5.3	72.2	1.2	7.0	5.5	0.33	2.51	2.63					13,170	
					4			44.5	55.5		5.8	79.2	1.3	7.7	5.9	0.36	2.75	2.80					14,440	
		799D	1	1	2	20	2.1	34.4	47.7	15.8	4.7	63.8	1.0	8.5	6.2	0.45	4.28	1.44	1900	1960	2010	6½	11,670	76
		4			3			35.1	48.8	16.1	4.5	65.2	1.1	6.8	6.3	0.46	4.37	1.47					11,910	
					4			41.9	58.1		5.4	77.7	1.3	8.1	7.5	0.55	5.22	1.75					14,200	
		799A-D	1	1	2	65	2.3	37.7	48.0	12.0	5.1	67.5	1.1	9.3	5.0	0.36	3.03	1.62	1930	2000	2060		12,330	76
		9*			3			38.6	49.1	12.3	5.0	69.1	1.1	7.4	5.1	0.36	3.10	1.67					12,620	
					4			44.0	56.0		5.6	78.8	1.3	8.5	5.8	0.42	3.53	1.89					14,380	
		800	1	1	2	63	1.9	38.2	49.9	10.0	5.2	70.3	1.2	8.0	5.3	0.32	3.05	1.98	1940	2000	2025	7	12,720	76
		X			3			38.9	50.9	10.2	5.1	71.6	1.2	6.5	5.4	0.33	3.10	2.02					12,970	
					4			43.3	56.7		5.7	79.7	1.3	7.2	6.1	0.36	3.45	2.24					14,430	
	Smith	730	1	1	2	67	2.6	40.7	46.6	10.1	5.2	70.3	1.1	8.6	4.7	0.13	2.56	2.00	1980	2030	2080	6½	12,740	76
		X			3			41.8	47.8	10.4	5.0	72.2	1.1	6.5	4.8	0.13	2.63	2.05					13,080	
					4			46.7	53.3		5.6	80.6	1.3	7.1	5.4	0.15	2.94	2.29					14,600	
		730A	1	1	2	69	1.8	37.7	48.1	12.4	5.1	68.6	1.1	7.2	5.6	0.09	3.21	2.28	2000	2050	2100	5½	12,550	76
		X			3			38.4	48.9	12.7	5.0	69.8	1.1	5.7	5.7	0.09	3.26	2.32					12,780	
					4			44.0	56.0		5.7	79.9	1.3	6.6	6.5	0.10	3.74	2.65					14,630	
	Warren	640	2	1	2	45	3.4	38.8	48.8	9.0														54
		X			3			40.2	50.5	9.3														
					4			44.3	55.7															
		642	1	1	2	43	2.5	41.2	45.9	10.4	5.2	70.6	1.2	8.0	4.6				1980	2030	2070		12,950	54
		X			3			42.3	47.0	10.7	5.1	72.5	1.3	5.7	4.7								13,280	
					4			47.3	52.7		5.7	81.1	1.4	6.5	5.3								14,870	
	Washington	722	1	1	1	62	2.0	41.2	47.1	9.7	5.1	71.5	1.2	8.2	4.3				1980	2030	2120	6½	12,920	76
		X			2		2.2	41.1	47.1	9.6	5.1	71.4	1.2	8.4	4.3	0.15	2.54	1.59					12,900	
					3			42.0	48.2	9.8	5.0	73.0	1.2	6.6	4.4	0.15	2.59	1.62					13,190	
					4			46.6	53.4		5.5	81.0	1.4	7.3	4.8	0.17	2.88	1.80					14,630	

		723	1	1	1	60	1.9	41.3	44.5	12.3	5.0	69.2	1.2	7.5	4.8				2000	2050	2100	5	12,560	76
		X			2		2.3	41.2	44.2	12.3	5.0	68.9	1.2	7.8	4.8	0.10	2.92	1.73					12,510	
					3			42.1	45.4	12.5	4.8	70.5	1.2	6.1	4.9	0.10	2.99	1.77					12,790	
					4			48.2	51.8		5.5	80.6	1.4	6.9	5.6	0.12	3.41	2.03					14,630	
		728	1	1	1	64	1.7	41.6	46.6	10.1	5.3	71.2	1.2	7.6	4.6				1990	2040	2090	6	12,930	76
		X			2		2.3	41.4	46.2	10.1	5.3	70.8	1.2	8.0	3.6	0.09	3.19	1.27					12,860	
					3			42.4	47.3	10.3	5.2	72.5	1.3	6.0	4.7	0.09	3.27	1.30					13,160	
					4			47.2	52.8		5.8	80.8	1.4	6.8	5.2	0.10	3.64	1.45					14,670	
		729	1	1	1	60	1.9	41.5	46.0	10.6	5.1	70.2	1.2	7.8	5.1				1980	2030	2080	5	12,770	76
		X			2		2.3	41.3	45.8	10.6	5.1	69.9	1.2	8.1	5.1	0.14	3.68	1.27					12,720	
					3			42.3	46.9	10.8	5.0	71.5	1.3	6.2	5.2	0.14	3.77	1.30					13,020	
					4			47.4	52.6		5.6	80.2	1.4	7.0	5.8	0.16	4.23	1.46					14,590	
	Wheeling	814	1	1	2	53	3.3	39.1	44.2	13.4	4.8	66.8	1.3	10.1	3.6	0.27	1.61	1.69	1980	2080	2180	5½	11,930	76
		X			3			40.4	45.8	13.8	4.6	69.1	1.3	7.5	3.7	0.28	1.67	1.75					12,340	
					4			46.9	53.1		5.3	80.1	1.5	8.8	4.3	0.32	1.94	2.03					14,320	
		815	1	1	2	55	3.5	38.8	47.8	9.9	5.2	69.3	1.3	10.2	4.1	0.31	1.91	1.85	2030	2080	2130	4	12,470	76
		X			3			40.1	49.6	10.3	5.0	71.7	1.4	7.4	4.2	0.32	1.98	1.92					12,910	
					4			44.7	55.3		5.5	79.9	1.5	8.4	4.7	0.35	2.20	2.14					14,390	
	York	643	1	1	2	58	2.8	42.1	46.6	8.5	5.3	71.2	1.2	9.0	4.8				1920	2020	2300		13,010	54
		X			3			43.3	48.0	8.7	5.1	73.2	1.2	6.9	4.9								13,380	
					4			47.5	52.5		5.6	80.2	1.4	7.4	5.4								14,660	
		724	1	1	1	76	1.7	44.5	42.5	11.3	5.2	69.9	1.2	7.4	5.0				1970	2020	2070	4½	12,710	76
		X			2		1.8	44.5	42.5	11.2	5.2	69.8	1.2	7.7	4.9	0.15	2.77	2.03					12,700	
					3			45.3	43.2	11.5	5.0	71.1	1.2	6.2	5.0	0.15	2.82	2.06					12,930	
					4			51.1	48.9		5.7	80.3	1.4	6.9	5.7	0.17	3.18	2.33					14,600	
		725	1	1	1	71	1.7	42.6	45.3	10.4	5.2	70.0	1.2	8.1	5.1				2000	2050	2100	6	12,820	76
		X			2		2.1	42.4	45.1	10.4	5.2	69.8	1.2	8.3	5.1	0.14	3.22	1.74					12,780	
					3			43.3	46.1	10.6	5.1	71.3	1.2	6.6	5.2	0.14	3.29	1.78					13,050	
					4			48.5	51.5		5.7	79.7	1.4	7.4	5.8	0.16	3.68	1.99					14,600	
Guernsey	Oxford	803	2	1	2	42	4.3	36.6	48.2	10.9	5.2	67.1	1.0	12.4	3.4	0.39	1.85	1.13	1875	2010	2090	6	12,090	76
		X			3			38.2	50.4	11.4	4.9	70.1	1.1	9.0	3.5	0.40	1.93	1.18					12,630	
					4			43.1	56.9		5.6	79.1	1.2	10.1	4.0	0.46	2.18	1.34					14,250	
Harrison	Cadiz	796	2	1	2	51	2.8	37.8	50.1	9.3	5.2	69.3	1.3	11.5	3.4	0.29	1.55	1.57	2070	2110	2150	5	12,620	76
		X			3			38.9	51.5	9.6	5.0	71.3	1.3	9.3	3.5	0.30	1.59	1.61					12,990	
					4			43.0	57.0		5.5	78.9	1.5	10.2	3.9	0.33	1.76	1.78					14,360	
Jefferson	Wayne	785A	2	1	2	6	2.3	38.0	51.6	8.1	5.2	71.7	1.3	9.9	3.8	0.14	1.88	1.75	2070	2100	2130	5½	13,070	76
		1			3			38.9	52.8	8.3	5.0	73.4	1.3	8.1	3.9	0.14	1.93	1.79					13,370	
					4			42.4	57.6		5.5	80.0	1.4	8.9	4.2	0.16	2.10	1.95					14,580	
		785B	2	1	2	5	2.6	38.0	51.4	8.0	5.1	70.4	1.3	10.3	4.9	0.13	2.98	1.84	2070	2100	2130	6	12,910	76
		2			3			39.0	52.8	8.2	4.9	72.3	1.4	8.1	5.1	0.13	3.06	1.89					13,260	
					4			42.5	57.5		5.4	78.7	1.5	8.9	5.5	0.14	3.33	2.06					14,440	
		785C	2	1	2	8	3.7	36.5	53.4	6.4	5.2	72.5	1.3	11.5	3.1	0.20	1.25	1.61	2030	2080	2130	7	13,090	76
		3			3			37.9	55.5	6.6	5.0	75.3	1.3	8.6	3.2	0.21	1.30	1.67					13,600	
					4			40.6	59.4		5.3	80.7	1.4	9.2	3.4	0.22	1.40	1.79					14,550	
		785D	2	1	2	6	3.3	40.4	48.9	7.4	5.1	72.8	1.4	10.3	3.0	0.08	1.69	1.24	2040	2090	2140	7½	13,100	76
		4			3			41.8	50.5	7.7	4.9	75.3	1.4	7.6	3.1	0.08	1.75	1.28					13,550	
					4			45.3	54.7		5.3	81.5	1.6	8.2	3.4	0.09	1.89	1.39					14,670	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)					Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
PITTSBURGH (NO. 8) COAL (continued)																							
Jefferson (continued)	Wayne (continued)	785E	2	1	2	8	3.1	30.3	42.7	23.9	4.3	57.9	1.1	9.8	3.0	0.20	1.68	1.09	2400	2450	2590	3½	10,450	76
		5			3			31.2	44.1	24.7	4.1	59.7	1.1	7.4	3.0	0.20	1.72	1.13					10,780	
					4			41.4	58.6		5.4	79.3	1.5	9.8	4.0	0.27	2.28	1.49					14,320	
		785F	2	1	2	8	3.0	36.5	54.4	6.1	5.2	72.8	1.3	11.5	3.1	0.23	1.37	1.55	2060	2100	2140	7	13,140	76
		6			3			37.6	56.1	6.3	5.0	75.1	1.4	9.0	3.2	0.23	1.41	1.59					13,540	
					4			40.1	59.9		5.3	80.1	1.5	9.6	3.5	0.25	1.50	1.70					14,450	
		785G	2	1	2	11	1.8	34.5	52.6	11.1	4.9	70.4	1.3	9.9	2.4	0.01	1.15	1.27	2320	2370	2430	7	12,690	76
		7			3			35.2	53.5	11.3	4.8	71.7	1.3	8.4	2.5	0.01	1.17	1.29					12,930	
					4			39.7	60.3		5.4	80.9	1.5	9.4	2.8	0.01	1.32	1.46					14,570	
		785H(A-G)	2	1	2	52	1.9	37.7	51.0	9.4	5.1	71.4	1.3	9.7	3.1	0.02	1.78	1.32	2000	2050	2100	5	12,840	76
		9			3			38.4	52.1	9.5	4.9	72.8	1.3	8.3	3.2	0.02	1.82	1.34					13,090	
					4			42.5	57.5		5.5	80.5	1.4	9.1	3.5	0.02	2.01	1.48					14,470	
		785A-G	2	1	2	52	2.8	35.9	50.8	10.5	5.0	69.6	1.3	10.4	3.2	0.13	1.60	1.44	2160	220	2260		12,590	76
		9*			3			36.9	52.3	10.8	4.8	71.6	1.3	8.2	3.3	0.13	1.65	1.48					12,950	
					4			41.4	58.6		5.4	80.2	1.5	9.2	3.7	0.15	1.85	1.66					14,520	
Monroe	Adams	664	3	4	2	45	2.6	40.8	44.6	12.0					6.2				1936	2080	2313	6½	12,510	56
		X			3			41.9	45.8	12.3					6.4								12,850	
					4			47.8	52.2						7.2								14,650	
		664A	3	4	2	F	1.9	43.5	46.4	8.2					4.6				1948	2130	2625		13,200	56
		X			3			44.3	47.3	8.4					4.7								13,450	
					4			48.4	51.6						5.2								14,680	
		665	3	4	2	50	1.6	42.4	45.7	10.3					5.6				2090	2140	2495	6	12,800	56
		X			3			43.0	46.5	10.5					5.7								13,010	
					4			48.1	51.9						6.4								14,540	
		665A	3	4	2	F	2.6	42.8	47.0	7.6					4.5				2090	2170	2653	6	13,210	56
		X			3			44.0	48.2	7.8					4.7								13,550	
					4			47.7	52.3						5.0								14,710	
	Jackson	688	3	3	1	38	1.0	42.0	46.2	10.8					6.6	0.01	4.74	1.86					13,000	70
		X			3			42.4	46.7	10.9					6.7	0.01	4.79	1.88					13,140	
					4			47.6	52.4						7.5	0.01	5.37	2.11					14,740	
	Malaga	699	3	3	1	50	1.7	41.2	47.3	9.8	4.9	71.3	1.2	8.0	4.8	0.03	2.94	1.84	2060	2200	2400		13,020	70
		X			3			41.9	48.1	10.0	5.0	72.6	1.2	6.3	4.9	0.03	2.99	1.87					13,250	
					4			46.6	53.4		5.7	80.6	1.3	7.0	5.4	0.03	3.32	2.08					14,720	
	Ohio	660	3	4	2	40	3.1	40.5	46.0	10.4					4.6				1995	2083	2404	7½	12,850	58
		X			3			41.8	47.4	10.8					4.7								13,250	
					4			46.8	53.2						5.3								14,850	
	Salem	652	3	4	2	57	2.5	40.4	46.7	10.4					4.9				1900	2070	2385	7½	12,790	55
		X			3			41.4	47.9	10.7					5.0								13,130	
					4			46.4	53.6						5.6								14,690	

	652A	3	4	2	F	1.9	41.6	48.6	7.9					4.4				1960	2120	2525		13,200	55
	X			3			42.4	49.5	8.1					4.5								13,450	
				4			46.1	53.9						4.9								14,630	
	653	3	4	2	46	3.1	38.8	47.5	10.6					4.7				1925	2030	2435	7½	12,730	56
	X			3			40.1	49.0	10.9					4.8								13,140	
				4			45.0	55.0						5.4								14,750	
	654	3	4	2	54	2.7	37.8	49.2	10.3					5.2				1915	2045	2465	7	12,840	56
	X			3			38.8	50.6	10.6					5.4								13,200	
				4			43.4	56.6						6.0								14,760	
	655	3	4	2	60	3.6	38.5	45.5	12.4					5.4				1935	2120	2480	7	12,370	56
	X			3			39.9	47.2	12.9					5.6								12,830	
				4			45.8	54.2						6.4								14,710	
	658	3	4	2	56	2.8	39.8	48.6	8.8					4.1				1971	2085	2405	6½	13,110	58
	X			3			40.9	50.0	9.1					4.2								13,480	
				4			45.0	55.0						4.6								14,830	
	659	3	4	2	51	2.8	38.5	48.0	10.7					5.4				1959	2017	2273	7½	12,710	58
	X			3			39.6	49.4	11.0					5.6								13,080	
				4			44.5	55.5						6.2								14,700	
	662	3	4	2	61	2.6	42.5	46.2	8.7					4.5				2000	2040	2470		13,040	55
	X			3			43.6	47.5	8.9					4.7								13,390	
				4			47.9	52.1						5.1								14,710	
	662A	3	4	2	61	2.5	40.6	48.1	8.8					4.4				1993	2080	2367	7	13,100	55
	X			3			41.7	49.3	9.0					4.5								13,440	
				4			45.8	54.2						5.0								14,780	
	733	1	1	1	31	1.8	39.3	45.7	13.2	4.9	68.9	1.2	7.8	4.0				2040	2090	2140	7	12,470	76
	X			2		2.0	39.2	45.7	13.1	5.0	68.7	1.2	8.0	4.0	0.18	2.96	0.88					12,440	
				3			40.0	46.6	13.4	4.8	70.1	1.2	6.4	4.1	0.18	3.02	0.90					12,700	
				4			46.2	53.8		5.6	80.9	1.4	7.4	4.7	0.21	3.49	1.03					14,660	
	734	1	1	1	38	1.2	39.4	47.5	11.9	5.0	69.8	1.2	7.9	4.2			0.64	2040	2090	2140	7	12,650	76
	X			2		1.7	39.2	47.3	11.8	5.1	69.4	1.2	8.3	4.2	0.15	3.40	0.64					12,580	
				3			39.9	48.1	12.0	5.0	70.6	1.2	6.9	4.3	0.15	3.46	0.65					12,800	
				4			45.3	54.7		5.6	80.3	1.3	8.0	4.8	0.17	3.93	0.74					14,550	
Sunsbury	650	3	4	2	50	2.5	40.5	45.4	11.6					5.3				1971	2070	2289	6	12,560	55
	X			3			41.5	46.6	11.9					5.4								12,880	
				4			47.1	52.9						6.2								14,610	
	651	3	4	2	62	2.8	40.6	45.7	10.9					5.8				1961	2029	2235	7	12,630	55
	X			3			41.8	47.0	11.2					6.0								13,000	
				4			47.0	53.0						6.1								14,630	
Switzerland	648	3	4	2	59	2.8	41.7	46.7	8.8					4.3				2015	2130	2369	6	12,970	55
	X			3			42.9	48.1	9.0					4.4								13,350	
				4			47.1	52.9						4.8								14,670	
	648A	3	4	2	59	2.5	42.0	46.4	9.1					4.3				2000	2100	2450		13,040	55
	X			3			43.1	47.6	9.3					4.4								13,370	
				4			47.5	52.5						4.9								14,740	
	649	3	4	2	44	2.5	40.7	45.9	10.9					5.0				1973	2040	2195	6	12,690	55
	X			3			41.7	47.1	11.2					5.1								13,020	
				4			47.0	53.0						5.7								14,650	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
PITTSBURGH (NO. 8) COAL (continued)																								
Monroe (continued)	Switzerland (continued)	663	3	4	2	54	3.1	40.2	47.3	9.4					4.5				1960	2140	2313	7	12,860	55
		X			3			41.5	48.8	9.7					4.7								13,270	
					4			46.0	54.0						5.2								14,700	
		726	1	1	1	61	1.7	41.2	46.5	10.6	5.1	70.8	1.2	7.8	4.5				1980	2030	2080	5	12,800	76
		X			2		2.0	41.1	46.4	10.5	5.1	70.6	1.2	8.1	4.5	0.10	2.90	1.47					12,760	
					3			41.9	47.4	10.7	5.0	72.0	1.2	6.5	4.6	0.10	2.96	1.50					13,020	
					4			46.9	53.1		5.6	80.7	1.4	7.2	5.1	0.11	3.32	1.68					14,590	
		727	1	1	1	61	1.6	41.9	46.9	9.6	5.3	71.4	1.2	7.9	4.6				2000	2050	2100	6½	12,930	76
		X			2		2.0	41.7	46.7	9.6	5.3	71.1	1.2	8.2	4.6	0.07	2.87	1.66					12,880	
					3			42.6	47.6	9.8	5.2	72.6	1.2	6.5	4.7	0.07	2.93	1.70					13,150	
					4			47.2	52.8		5.8	80.4	1.3	7.3	5.2	0.08	3.25	1.88					14,570	
		731	1	1	1	56	1.7	43.3	46.2	8.8	5.3	72.7	1.3	8.3	3.6				2040	2090	2190	7½	13,120	76
		X			2		2.0	43.2	46.0	8.8	5.3	72.5	1.3	8.5	3.6	0.13	2.08	1.41					13,090	
					3			44.1	46.9	9.0	5.2	74.0	1.3	6.8	3.7	0.13	2.13	1.43					13,350	
					4			48.4	51.6		5.7	81.2	1.4	7.6	4.1	0.15	2.34	1.58					14,660	
		732	1	1	1	55	1.7	41.0	46.2	11.1	5.3	70.3	1.2	7.2	4.9				2040	2090	2200	7	12,750	76
		X			2		2.0	40.9	46.1	11.0	5.3	70.1	1.2	7.5	4.9	0.21	3.43	1.24					12,710	
					3			41.7	47.0	11.3	5.2	71.5	1.3	5.7	5.0	0.21	3.50	1.26					12,970	
					4			47.0	53.0		5.8	80.6	1.4	6.6	5.6	0.24	3.94	1.42					14,620	
REDSTONE (NO. 8A) COAL																								
Meigs	Chester	710	3	3	1	40	4.4	43.0	43.7	8.9	4.8	68.5	1.1	13.3	3.4	0.13	2.32	0.94	2080	2170	2380		12,290	70
		X			3			45.0	45.7	9.3	5.0	71.7	1.2	9.3	3.5	0.14	2.43	0.98					12,870	
					4			49.6	50.4		5.5	79.0	1.3	10.3	3.9	0.14	3.67	1.09					14,180	
	Lebanon	711	3	3	1	42	4.0	42.7	44.3	9.0	4.6	69.5	1.1	12.6	3.2	0.11	2.35	0.73	2140	2300	2490		12,280	70
		X			3			44.5	46.1	9.4	4.9	72.7	1.2	8.5	3.3	0.11	2.45	0.76					12,790	
					4			49.1	50.9		5.4	80.2	1.3	9.5	3.6	0.12	2.71	0.83					14,110	
MEIGS CREEK (NO. 9) COAL																								
Belmont	Kirkwood	816	3	1	2	42	1.8	38.3	47.8	12.1	5.0	68.9	1.3	9.7	3.0	0.05	1.86	1.05	2080	2130	2230	5½	12,380	77
		X			3			39.0	48.7	12.3	4.9	70.2	1.3	8.3	3.0	0.05	1.89	1.07					12,600	
					4			44.5	55.5		5.6	80.0	1.5	9.5	3.4	0.06	2.16	1.22					14,370	
	Union	798	1	1	2	54	2.8	38.7	49.4	9.1	5.2	70.0	1.2	11.5	3.0	0.19	0.85	1.96	2190	2280	2380	6	12,710	76
		X			3			39.8	50.8	9.4	5.1	72.0	1.3	9.1	3.1	0.19	0.88	2.02					13,070	
					4			43.9	56.1		5.6	79.5	1.4	10.1	3.4	0.21	0.97	2.23					14,420	
	Warren	641	2	1	2	37	2.8	37.2	48.0	12.0	5.1	69.2	1.2	9.7	2.8				2460	2560	2680		12,540	54
		X			3			38.2	49.5	12.3	4.9	71.2	1.3	7.4	2.9								12,900	
					4			43.6	56.4		5.6	81.2	1.4	8.5	3.3								14,710	
Harrison	Athens	737A	1	1	2	30	3.0	40.1	46.4	10.5	5.5	70.0	1.4	9.8	2.8	0.06	1.74	0.97	2200	2250	2300	4	12,650	76
		1			3			41.4	47.8	10.8	5.3	72.1	1.4	7.5	2.9	0.06	1.79	1.00					13,040	
					4			46.4	53.6		5.9	80.9	1.6	8.4	3.2	0.07	2.01	1.12					14,610	

		737B	1	1	2	22	3.2	35.1	45.6	16.1	5.0	65.3	1.2	10.8	1.6	0.02	0.68	0.90	2910+			5	11,630	76
		2			3			36.3	47.0	16.7	4.7	67.5	1.3	8.1	1.7	0.02	0.70	0.93					12,020	
					4			43.6	56.4		5.7	81.0	1.5	9.8	2.0	0.02	0.85	1.12					14,420	
		737A,B	1	1	2	52	3.1	38.0	46.1	12.8	5.3	68.0	1.4	10.2	2.3	0.04	1.29	0.92	2490				12,220	76
		9*			3			39.2	47.6	13.2	5.1	70.2	1.4	7.7	2.3	0.04	1.33	0.96					12,610	
					4			45.2	54.8		5.9	80.9	1.7	8.8	2.7	0.04	1.52	1.12					14,530	
		784A	1	1	2	17	4.0	39.2	47.8	9.0	5.5	70.4	1.4	11.7	2.0	0.07	1.09	0.80	2340	2390	2450	4	12,360	76
		1			3			40.8	49.8	9.4	5.2	73.3	1.5	8.5	2.1	0.07	1.13	0.93					13,160	
					4			45.0	55.0		5.8	80.9	1.6	9.3	2.4	0.08	1.25	1.02					14,520	
		784B	1	1	2	13	4.7	34.0	52.4	8.9	5.2	70.1	1.4	13.1	1.3	0.04	0.40	0.87	2740	2910+		3½	12,520	76
		2			3			35.7	55.0	9.3	4.9	73.5	1.4	9.5	1.4	0.04	0.42	0.92					13,140	
					4			39.4	60.6		5.4	81.1	1.6	10.4	1.5	0.05	0.47	1.01					14,490	
		784C	1	1	2	10	4.2	34.1	52.6	9.1	5.2	69.9	1.3	13.3	1.2	0.01	0.40	0.83	2670	2730	2790	3	12,440	76
		3			3			35.6	54.9	9.5	4.9	72.9	1.4	10.0	1.3	0.01	0.42	0.86					12,990	
					4			39.3	60.7		5.4	80.5	1.5	11.2	1.4	0.01	0.47	0.95					14,350	
		784A-C	1	1	2	40	4.3	36.2	50.5	9.0	5.3	70.2	1.4	12.5	1.6	0.04	0.69	0.83	2550	2640			12,540	76
		9*			3			37.8	52.8	9.4	5.0	73.3	1.5	9.1	1.7	0.04	0.71	0.91					13,100	
					4			41.8	58.2		5.6	80.9	1.6	10.1	1.8	0.04	0.79	0.97					14,460	
		792A	1	1	2	19	2.4	37.5	49.6	10.5	5.2	70.0	1.3	10.1	2.9	0.02	1.65	1.25	2130	2180	2280	4½	12,510	76
		1			3			38.4	50.8	10.8	5.1	71.7	1.3	8.1	3.0	0.02	1.69	1.28					12,820	
					4			43.0	57.0		5.7	80.4	1.5	9.0	3.4	0.02	1.90	1.44					14,370	
		792B	1	1	2	12	4.5	35.8	50.1	9.6	5.2	69.9	1.4	12.2	1.7	0.17	0.52	1.00	2580	2630	2830	6	12,450	76
		2			3			37.5	52.5	10.0	4.9	73.2	1.4	8.7	1.8	0.18	0.55	1.05					13,030	
					4			41.7	58.3		5.5	81.4	1.6	9.5	2.0	0.20	0.61	1.16					14,490	
		792C	1	1	2	14	3.7	35.9	51.6	8.8	5.3	69.9	1.4	12.2	2.4	0.30	1.23	0.85	2080	2185	2220	6	12,500	76
		3			3			37.3	53.6	9.1	5.1	72.5	1.4	9.4	2.5	0.31	1.28	0.88					12,970	
					4			41.0	59.0		5.6	79.8	1.6	10.3	2.7	0.34	1.41	0.97					14,270	
		792A-C	1	1	2	45	3.4	36.6	50.3	9.7	5.2	70.0	1.4	11.3	2.4	0.14	1.22	1.06	2230	2300	2400		12,490	76
		9*			3			37.9	52.1	10.0	5.0	72.5	1.4	8.6	2.5	0.15	1.27	1.09					12,890	
					4			42.1	57.9		5.6	80.5	1.6	9.5	2.8	0.16	1.41	1.22					14,370	
	Short Creek	797	1	1	2	34	3.1	35.1	51.7	10.1	5.1	70.2	1.3	11.4	1.9	0.12	0.63	1.17	2480	2530	2640	4	12,570	76
		X			3			36.2	53.4	10.4	4.9	72.4	1.3	9.0	2.0	0.12	0.66	1.21					12,970	
					4			40.4	59.6		5.5	80.9	1.5	9.9	2.2	0.14	0.73	1.35					14,470	
Monroe	Malaga	690	3	3	1	26	1.5	37.9	42.8	17.8					5.4	0.01	3.52	1.87					11,760	70
		X			3			38.4	43.5	18.1					5.5	0.01	3.57	1.90					11,940	
					4			46.9	53.1						6.7	0.01	4.36	2.32					14,510	
WAYNESBURG (NO. 11) COAL																								
Belmont	Colerain	788	4	1	2	36	3.7	32.4	42.3	21.6	4.6	58.3	1.1	11.2	3.2	0.30	1.85	1.02	2140	2190	2420	4	10,570	76
		X			3			33.6	43.9	22.5	4.3	60.6	1.2	8.1	3.3	0.31	1.92	1.06					10,970	
					4			43.4	56.6		5.6	78.1	1.5	10.6	4.2	0.40	2.48	1.37					14,150	
		789A	2	1	2	14	2.2	31.6	42.7	23.5	4.6	58.7	0.9	9.9	2.4	0.02	1.35	1.08	2665	2745	2795	4½	10,600	76
		1			3			32.3	43.7	24.0	4.5	60.0	0.9	8.1	2.5	0.02	1.38	1.10					10,840	
					4			42.5	57.5		5.9	78.9	1.2	10.7	3.3	0.03	1.81	1.45					14,260	
		789B	2	1	2	20	1.8	35.9	47.0	15.3	4.8	66.6	1.3	10.1	1.9	0.01	0.92	0.98	2520	2570	2620	5	11,930	76
		2			3			36.6	47.8	15.6	4.7	67.9	1.3	8.6	1.9	0.01	0.93	1.00					12,150	
					4			43.4	56.6		5.6	80.4	1.6	10.1	2.3	0.01	1.11	1.18					14,390	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
WAYNESBURG (NO. 11) COAL (continued)																								
Belmont (continued)	Colerain (continued)	789A,B	2	1	2	34	2.0	34.1	45.2	18.7	4.7	63.4	1.1	10.0	2.1	0.01	1.09	1.02	2580	2640	2690		11,380	76
		9*			3			34.8	46.1	19.1	4.6	64.7	1.1	8.4	2.1	0.01	1.11	1.03					11,610	
					4			43.0	57.0		5.6	79.9	1.4	10.4	2.7	0.01	1.39	1.28					14,350	
	Goshen	791A	2	1	2	17	1.9	36.6	43.8	17.7	4.8	63.7	1.2	9.6	3.0	0.01	2.06	0.97	2280	2380	2480	4½	11,520	76
		1			3			37.3	44.7	18.0	4.7	64.9	1.2	8.1	3.1	0.01	2.10	0.99					11,750	
					4			45.6	54.4		5.7	79.2	1.5	9.8	3.8	0.01	2.57	1.20					14,330	
		791B	2	1	2	11	4.3	31.8	41.6	22.3	4.5	58.5	1.2	11.8	1.7	0.16	0.66	0.89	2600	2650	2850	4	10,460	76
		2			3			33.2	43.5	23.3	4.2	61.2	1.3	8.2	1.8	0.16	0.69	0.93					10,940	
					4			43.3	56.7		5.5	79.8	1.6	10.8	2.3	0.21	0.90	1.21					14,260	
		791A,B	2	1	2	28	2.9	34.7	42.9	19.5	4.7	61.6	1.2	10.5	2.5	0.07	1.49	0.93	2410	2490	2630		11,090	76
		9*			3			35.7	44.2	20.1	4.5	63.4	1.2	8.2	2.6	0.07	1.53	0.96					11,420	
					4			44.7	55.3		5.6	79.4	1.6	10.2	3.2	0.09	1.90	1.20					14,300	
	Richland	778A	2	1	2	18	3.9	32.9	47.0	16.2	4.9	64.5	1.3	11.0	2.1	0.09	1.13	0.91	2300	2350	2450	5½	11,460	76
		1			3			34.3	48.8	16.9	4.6	67.1	1.4	7.8	2.2	0.09	1.18	0.94					11,930	
					4			41.2	58.8		5.5	80.8	1.6	9.4	2.7	0.11	1.42	1.14					14,350	
		778B	2	1	2	8	3.5	35.1	48.5	12.9	5.0	66.4	1.3	12.3	2.1	0.20	0.93	0.98	2520	2570	2620	5	11,940	76
		2			3			36.4	50.2	13.4	4.7	68.8	1.4	9.5	2.2	0.21	0.97	1.02					12,370	
					4			42.1	57.9		5.5	79.4	1.6	11.0	2.5	0.24	1.12	1.18					14,280	
		778C	2	1	2	10	3.1	35.6	46.1	15.2	5.0	66.1	1.3	10.0	2.4	0.10	1.26	1.07	2360	2410	2460	6	11,770	76
		3			3			36.8	47.6	15.6	4.8	68.2	1.4	7.5	2.5	0.10	1.30	1.11					12,140	
					4			43.6	56.4		5.6	80.8	1.6	9.0	3.0	0.12	1.55	1.31					14,390	
		778D	2	1	2	5	2.2	29.5	40.8	27.5	4.0	55.7	0.9	9.0	2.9	0.25	0.39	2.29	2320	2420	2530	1	9,820	76
		4			3			30.1	41.8	28.1	3.9	56.9	1.0	7.1	3.0	0.26	0.40	2.34					10,040	
					4			41.9	58.1		5.4	79.2	1.3	9.9	4.2	0.35	0.55	3.25					13,960	
		778E(A-C)	2	1	2	36	2.1	35.8	48.0	14.1	4.8	66.7	1.3	11.1	2.0	0.01	1.13	0.87	2530	2580	2630	5	12,030	76
		9			3			36.6	49.0	14.4	4.7	68.2	1.3	9.4	2.0	0.01	1.15	0.89					12,290	
					4			42.7	57.3		5.5	79.7	1.6	10.8	2.4	0.01	1.34	1.03					14,350	
		778A-C	2	1	2	36	3.6	34.2	47.1	15.1	5.0	65.4	1.3	11.0	2.2	0.11	1.12	0.97	2410	2420	2490		11,660	76
		9*			3			35.5	48.8	15.7	4.8	67.8	1.3	8.1	2.3	0.12	1.16	1.00					12,090	
					4			42.1	57.9		5.6	80.5	1.6	9.6	2.7	0.14	1.38	1.19					14,340	
		778A-D	2	1	2	41	3.4	33.6	46.4	16.6	4.8	64.2	1.3	10.8	2.3	0.13	1.03	1.12	2400	2420	2500		11,440	76
		9*			3			34.8	48.0	17.2	4.6	66.5	1.3	8.0	2.4	0.13	1.07	1.16					11,850	
					4			42.0	58.0		5.5	80.3	1.6	9.7	2.9	0.16	1.28	1.44					14,300	
		779A	2	1	2	4	2.9	33.9	41.5	21.7	4.5	59.8	1.1	10.6	2.3	0.18	1.39	0.74	2380	2430	2730	3	10,770	76
		1			3			34.9	42.7	22.4	4.3	61.6	1.2	8.1	2.4	0.18	1.44	0.76					11,090	
					4			45.0	55.0		5.6	79.3	1.5	10.5	3.1	0.24	1.85	0.98					14,280	
		779B	2	1	2	17	3.6	32.8	48.8	14.8	5.2	65.8	1.0	11.3	1.9	0.12	0.93	0.83	2560	2670	2720	6½	11,700	76
		2						34.1	50.5	15.4	5.0	68.3	1.0	8.3	2.0	0.12	0.97	0.87					12,130	
								40.3	59.7		5.9	80.7	1.2	9.9	2.3	0.15	1.14	1.02					14,340	

		779C	2	1	2	12	4.8	33.1	46.4	15.7	4.8	64.7	1.2	11.0	2.6	0.18	1.27	1.12	2030	2080	2180	6	11,410	76
		3			3			34.8	48.8	16.4	4.5	68.0	1.3	7.1	2.7	0.19	1.33	1.17					11,990	
					4			41.7	58.3		5.4	81.4	1.6	8.4	3.2	0.22	1.59	1.41					14,350	
		779D(B,C)	2	1	2	29	2.8	31.7	47.3	18.2	4.9	62.1	1.1	10.9	2.8	0.25	1.53	0.99	2090	2200	2320	4	11,230	76
		9			3			32.6	48.7	18.7	4.7	63.9	1.2	8.7	2.8	0.26	1.58	1.01					11,550	
					4			40.1	59.9		5.8	78.6	1.5	10.6	3.5	0.32	1.94	1.25					14,210	
		779B,C	2	1	2	29	4.1	32.9	47.8	15.2	5.0	65.3	1.1	11.2	2.2	0.14	1.07	0.95	2340	2430	2500		11,580	76
		9*			3			34.3	49.9	15.8	4.7	68.1	1.2	7.9	2.3	0.14	1.12	1.00					12,070	
					4			40.8	59.2		5.6	80.9	1.4	9.4	2.7	0.17	1.32	1.18					14,350	
		779A-C	2	1	2	33	4.0	33.1	47.0	15.9	5.0	64.7	1.1	11.1	2.2	0.14	1.10	0.92	2350	2430	2520		11,480	76
		9*			3			34.5	48.9	16.6	4.7	67.4	1.1	7.9	2.3	0.15	1.15	0.96					11,950	
					4			41.3	58.7		5.7	80.8	1.4	9.4	2.7	0.18	1.38	1.15					14,330	
		793A	2	1	2	14	1.8	34.2	44.0	20.0	4.6	62.4	1.2	9.4	2.4	0.01	1.70	0.72	2520	2570	2620	2½	11,200	76
		1			3			34.8	44.9	20.3	4.4	63.5	1.2	8.1	2.5	0.01	1.73	0.73					11,410	
					4			43.7	56.3		5.6	79.8	1.5	10.0	3.1	0.01	2.17	0.92					14,320	
		793B	2	1	2	24	3.4	32.4	47.8	16.4	4.9	63.7	0.9	11.8	2.3	0.20	1.20	0.89	2650	2730	2800+	3½	11,390	76
		2			3			33.5	49.5	17.0	4.7	66.0	0.9	9.0	2.4	0.21	1.25	0.92					11,790	
					4			40.4	59.6		5.6	79.5	1.1	10.9	2.9	0.25	1.50	1.10					14,200	
		793C	2	1	2	8	2.2	32.6	47.1	18.1	4.6	64.2	1.2	10.1	1.8	0.01	0.97	0.86	2530	2580	2630	5	11,450	76
		3			3			33.3	48.2	18.5	4.4	65.6	1.3	8.3	1.9	0.01	0.99	0.88					11,710	
					4			40.9	59.1		5.4	80.5	1.6	10.2	2.3	0.01	1.21	1.08					14,370	
		793A-C	2	1	2	46	2.7	33.0	46.5	17.8	4.8	63.4	1.0	10.8	2.2	0.10	1.30	0.82	2590	2650	2710		11,340	76
		9*			3			33.9	47.8	18.3	4.6	65.2	1.0	8.6	2.3	0.11	1.34	0.85					11,650	
					4			41.5	58.5		5.7	79.7	1.2	10.6	2.8	0.13	1.64	1.04					14,260	
	Union	619	3	3	1	37	2.2	35.6	45.6	16.6					3.1								11,810	57
		X			2		4.2	34.9	44.7	16.2					3.0								11,570	
					3			36.4	46.6	17.0					3.2								12,080	
					4			43.8	56.2						3.8								14,540	
Jefferson	Mt. Pleasant	780A	2	1	2	14	4.0	35.4	45.7	14.9	4.9	63.9	1.3	10.4	4.6	0.20	3.40	1.02	2030	2080	2130	5	11,570	76
		1			3			36.9	47.6	15.5	4.6	66.6	1.4	7.1	4.8	0.21	3.54	1.06					12,050	
					4			43.6	46.4		5.5	78.8	1.6	8.4	5.7	0.24	4.19	1.25					14,260	
		780B	2	1	2	7	3.4	34.8	48.4	13.4	4.9	66.5	1.4	10.6	3.2	0.15	2.50	0.56	2040	2090	2140	5	11,950	76
		2			3			36.1	50.1	13.8	4.6	68.8	1.4	8.1	3.3	0.15	2.59	0.58					12,370	
					4			41.8	58.2		5.4	79.9	1.7	9.1	3.9	0.18	3.01	0.68					14,360	
		780C	2	1	2	11	3.9	30.4	42.1	23.6	4.4	57.5	1.2	10.3	3.0	0.21	1.95	0.89	2140	2190	2310	5	10,250	76
		3			3			31.6	43.9	24.5	4.2	59.8	1.3	7.0	3.2	0.22	2.03	0.92					10,660	
					4			41.8	58.2		5.5	79.3	1.7	9.3	4.2	0.29	2.69	1.22					14,130	
		780D(A-C)	2	1	2	32	3.1	33.7	45.6	17.6	4.8	62.4	1.2	10.8	3.2	0.20	2.01	1.00	2060	2110	2160	5½	11,290	76
		9			3			34.8	47.0	18.2	4.6	64.4	1.5	8.0	3.3	0.21	2.08	1.03					11,650	
					4			42.5	57.5		5.6	18.7	1.5	10.2	4.0	0.25	2.54	1.26					14,230	
		780A-C	2	1	2	32	3.8	33.5	45.1	17.6	4.7	62.2	1.3	10.4	3.8	0.19	2.70	0.87	2070	2120	2190		11,190	76
		9*			3			34.8	46.9	18.3	4.4	64.7	1.4	7.3	3.9	0.20	2.81	0.90					11,630	
					4			42.6	57.4		5.5	79.1	1.7	8.9	4.8	0.24	3.41	1.11					14,240	
		787A	2	1	2	13	3.0	35.0	44.3	17.7	4.8	60.8	0.8	10.8	5.1	0.61	3.10	1.42	2020	2080	2130	6	11,060	76
		1			3			36.1	45.7	18.2	4.6	62.7	0.9	8.3	5.3	0.63	3.19	1.47					11,410	
					4			44.1	55.9		5.6	76.6	1.0	10.3	6.5	0.77	3.90	1.80					13,950	
		787B	2	1	2	10	2.9	33.7	47.5	15.9	4.9	64.7	0.9	10.8	2.8	0.18	1.41	1.23	2320	2405	2450	6½	11,580	76
		2			3			34.9	48.7	16.4	4.7	66.6	0.9	8.5	2.9	0.18	1.44	1.25					11,930	
					4			41.5	58.5		5.5	80.0	1.1	10.0	3.4	0.22	1.72	1.50					14,270	

County	Township	OGS file no.	Kind	Source	Condition	Analyzed thickness (nearest in)	Proximate (%)			Ultimate (%)						Forms of sulfur (%)			Fusibility of ash				Heating value (Btu)	Year
							Moisture	Volatile matter	Fixed carbon	Ash	Hydrogen	Carbon	Nitrogen	Oxygen	Total sulfur	Sulfate	Pyritic	Organic	Initial deformation temperature (°F)	Softening temperature (°F)	Fluid temperature (°F)	Free-swelling index		
WAYNESBURG (NO. 11) COAL (continued)																								
Jefferson (continued)	Mt. Pleasant (continued)	787C	2	1	2	14	3.2	33.4	47.4	16.0	4.8	63.4	1.0	11.3	3.5	0.27	1.89	1.34	2090	2200	2280	6½	11,470	76
		3			3			34.5	48.9	16.6	4.6	65.4	1.0	8.8	3.6	0.28	1.95	1.38					11,840	
					4			41.3	58.7		5.5	78.4	1.2	10.6	4.3	0.33	2.34	1.65					14,190	
		787D(A-C)	2	1	2	37	3.6	36.3	42.8	17.3	5.0	61.9	1.2	10.8	3.8	0.36	2.31	1.10	2090	2140	2190	5½	11,200	76
		9			3			37.7	44.3	18.0	4.7	64.1	1.3	8.0	3.9	0.37	2.39	1.14					11,610	
					4			45.9	54.1		5.8	78.2	1.5	9.7	4.8	0.45	2.91	1.39					14,150	
		787A-C	2	1	2	37	3.0	34.0	46.4	16.6	4.8	62.9	0.9	11.0	3.8	0.36	2.16	1.33	2130	2220	2280		11,360	76
		9*			3			35.1	47.8	17.1	4.6	64.8	0.9	8.6	4.0	0.37	2.23	1.37					11,710	
					4			42.3	57.7		5.5	78.2	1.1	10.4	4.8	0.44	2.69	1.65					14,130	
		790A	2	1	2	17	7.3	32.3	42.4	18.0	4.8	58.5	1.0	16.7	1.0	0.10	0.21	0.67	2580	2630	2740	½	10,380	76
		1			3			34.9	45.7	19.4	4.2	63.1	1.1	11.1	1.1	0.11	0.23	0.73					11,190	
					4			43.3	56.7		5.3	78.3	1.3	13.8	1.3	0.13	0.29	0.90					13,880	
		790B	2	1	2	21	2.8	34.2	49.3	13.7	4.9	66.9	1.4	11.9	1.2	0.03	0.51	0.64	2630	2680	2780	2	11,860	76
		2			3			35.2	50.7	14.1	4.7	68.9	1.4	9.7	1.2	0.03	0.52	0.66					12,280	
					4			40.9	59.1		5.5	80.2	1.6	11.3	1.4	0.04	0.61	0.76					14,200	
		790A,B	2	1	2	38	4.8	33.3	46.3	15.6	4.9	63.1	1.2	14.1	1.1	0.06	0.37	0.65	2610	2660	2760		11,190	76
		9*			3			35.0	48.6	16.4	4.6	66.3	1.3	10.3	1.1	0.06	0.38	0.69					11,790	
					4			41.8	58.2		5.5	79.3	1.5	12.3	1.4	0.08	0.46	0.82					14,050	

Tables 3 through 10 in pocket

Tables 11 and 12 are reproduced without revision from Ohio Division of Geological Survey Bulletin 58 (Brant and DeLong, 1960)

TABLE 11.–*Proximate-ultimate coal analyses by county*

Footnote key:

1. File number: A basic 6-digit sample number is used. Suffixes A through I indicate samples taken at different points in the same location; K denotes composite of these samples. Suffixes 1 through 8 indicate samples taken vertically or in benches at same point: 9 denotes composite of these samples; where samples have been taken vertically at one point only, letter suffix is not needed or used
2. Kind: 1 - channel (mine); 2 - channel (outcrop); 3 - column or core; 4 - gross mine sample; 7 - tipple
3. Source: 1 - U.S. Bureau of Mines and/or U.S. Geological Survey; 2 - Ohio Geological Survey; 3 - Engineering Experiment Station, Ohio State University; 4 - special or miscellaneous
4. Condition: 1 - as received; 2 - moisture-free; 3 - moisture- and ash-free; 4 - dry unit coal; 5 - moist unit coal
5. Condition 1 air-dried; boghead coal
6. Not in composite 486 K
7. Sample wet; moisture probably 2% high
8. Condition 1 air-dried; composite (9) weighted average calculated on thickness in 4-component units, 585 (1-4)
9. Ultimate and colorific value tests made several weeks after preparation of sample; calories probably 100° high
10. Not in composite 170 K
11. Condition 1 air-dried; composite (9) total or average calculated on thickness
12. No exact location or thickness available; use as general-purpose sample
13. Duplicate sample taken 15 days after 607 A
14. Duplicate sample taken 10 months after 604 B
15. Coal sample crushed to -60 mesh and stored for some time; probably somewhat weathered before Btu determination
16. Not in composite 587 9
17. Not in composite 598 B 9
18. Not in composite 596 A 9
19. Equilibrated values available in files of Ohio Geological Survey
20. Average values calculated on weight of individual sections
21. Sample from same mine on same date but from two separate seams

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
									ATHENS COUNTY								
ALEXANDER	PITTSBURGH	188	1	2	1	7.13	41.51	42.09	9.27	4.52	5.40	64.40	.96	15.45	6559	11807	28
					2		44.70	45.32	9.98	4.87	4.97	69.34	1.03	9.81	7062	12713	
					3		49.66	50.34		5.41	5.52	77.03	1.14	10.90	7846	14122	
					4		48.48	51.52							8004	14408	
					5	8.15	44.52	47.33							7353	13235	
ATHENS	MIDDLE KITTANNING	298	1	2	1	6.17	36.40	49.61	7.82	.90	5.43	69.22	1.30	15.33	6868	12362	2
					2		38.80	52.87	8.33	.96	5.05	73.77	1.39	10.50	7319	13174	
					3		42.33	57.67		1.05	5.51	80.47	1.52	11.45	7984	14371	
					4		41.72	58.28							8060	14508	
					5	6.78	38.89	54.33							7514	13526	
BERN	PITTSBURGH	277	1	1	2	1	6.60	35.05	48.15	10.20	3.41	5.13	66.61	.93	13.72	6607	11893	7
						2		37.53	51.55	10.92	3.65	4.71	71.32	1.00	8.40	7074	12733
						3		42.13	57.87		4.10	5.29	80.06	1.12	9.43	7941	14293
						4		40.83	59.17							8088	14559
						5	7.58	37.73	54.69							7476	13457
"	"	277	2	1	2	1	4.51	38.24	45.76	11.49	4.88	5.10	65.92	.99	11.62	6636	11945	7
						2		40.05	47.92	12.03	5.11	4.82	69.03	1.04	7.97	6949	12508
						3		45.53	54.47		5.81	5.48	78.47	1.18	9.06	7899	14218
						4		44.00	56.00							8084	14552
						5	5.31	41.66	53.03							7656	13780
"	"	278	1	1	2	1	5.94	40.15	45.26	8.65	3.35	5.32	67.82	1.28	13.58	6774	12194	28
						2		42.68	48.12	9.20	3.56	4.96	72.10	1.36	8.82	7202	12964
						3		47.00	53.00		3.92	5.46	79.41	1.50	9.71	7932	14277
						4		45.99	54.01							8062	14512
						5	6.69	42.92	50.39							7522	13540
"	"	278	2	1	2	1	5.66	43.96	43.52	6.86	4.10	5.46	68.25	1.08	14.25	6939	12491	28
						2		46.60	46.13	7.27	4.35	5.12	72.34	1.14	9.78	7355	13240
						3		50.25	49.75		4.69	5.52	78.01	1.23	10.55	7932	14278
						4		49.33	50.67							8060	14508
						5	6.27	46.24	47.49							7556	13600
"	"	279	A	1	2	1	5.78	37.43	48.79	8.00	4.19	5.14	67.55	.95	14.17	6833	12299	7
						2		39.73	51.78	8.49	4.45	4.78	71.69	1.01	.58	7252	13053
						3		43.42	56.58		4.86	5.22	78.35	1.10	10.47	7925	14264
						4		42.17	57.83							8064	14516
						5	6.49	39.43	54.08							7542	13575
"	"	279	B	1	2	1	3.62	44.84	44.69	6.85	3.74					6980	12564	29
						2		46.52	46.37	7.11	3.88					7242	13036
						3		50.08	49.92		4.18					7796	14033
						4		49.23	50.77							7911	14239
						5	4.00	47.26	48.74							7594	13669
"	"	279	C	1	2	1	3.70	43.85	44.61	7.84	4.24					6949	12508	29
						2		45.53	46.33	8.14	4.40					7216	12989
						3		49.56	50.44		4.79					7855	14139
						4		48.56	51.44							7989	14381
						5	4.15	46.65	49.30							7658	13784
"	"	281	1	1	2	1	5.87	41.93	43.39	8.81	4.01	5.35	67.06	1.05	13.72	6806	12251	28
						2		44.54	46.10	9.36	4.26	5.00	71.24	1.12	9.02	7230	13015
						3		49.14	50.86		4.70	5.52	78.59	1.24	9.95	7977	14359
						4		48.07	51.93							8123	14622
						5	6.65	44.88	48.47							7583	13650
"	"	281	2	1	2	1	6.31	43.16	42.95	7.58	3.75	5.49	67.28	1.52	14.38	6879	12383	28
						2		46.07	45.84	8.09	4.00	5.11	71.81	1.62	9.37	7342	13217
						3		50.13	49.87		4.35	5.56	78.14	1.76	10.19	7988	14380
						4		49.20	50.80							8119	14615
						5	7.03	45.74	47.23							7549	13588
"	"	583	1[5]	1	3	1	.72	47.48	4.01	47.79	6.49					1783	3209	52
						2		47.82	4.04	48.14	6.54					1796	3232	
						3		92.21	7.79		12.61					3463	6232	
						4		93.11	6.89							3634	6541	
						5	1.61	91.61	6.78							3576	6436	
"	"	583	2[5]	1	3	1	1.53	28.21	25.54	44.72	2.48					4068	7322	52
						2		28.65	25.94	45.41	2.52					4131	7436	
						3		52.48	47.52		4.62					7567	13622	
						4		48.43	51.57							8192	14746	
						5	3.04	46.96	50.00							7944	14299	
"	"	583	3[5]	1	3	1	1.77	43.19	44.34	10.70	6.31					6934	12482	52
						2		43.97	45.14	10.89	6.42					7059	12707	
						3		49.34	50.66		7.20					7922	14260	
						4		47.85	52.12							8123	14622	
						5	2.08	46.85	51.07							7954	14318	
"	"	605	1	1	3	1	5.80	38.04	43.83	12.33	6.64					6344	11419	54
						2		40.38	46.53	13.09	6.94					6735	12122	
						3		46.46	53.54		7.99					7749	13948	
						4		44.56	55.44							7973	14352	
						5	6.98	41.45	51.57							7417	13350	

Township	Seam	File number (1)	Kind (2)	Source (3)	Condition (4)	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Proximate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								ATHENS COUNTY (CON.)									
BERN	PITTSBURGH	605 2	1	3	1	6.51	37.83	43.99	11.67	6.32					6307	11354	54
					2		40.47	47.05	12.48	6.76					6746	12145	
					3		46.24	53.76		7.72					7708	13877	
					4		44.40	55.60							7922	14259	
					5	7.76	40.95	51.29							7307	13153	
CANAAN	"	275	1	2	1	7.37	39.02	42.53	11.08	4.20					6407	11533	28
					2		42.12	45.92	11.96	4.54					6917	12451	
					3		47.84	52.16		5.16					7857	14142	
					4		46.52	53.48							8028	14451	
					5	8.60	42.52	48.88							7338	13208	
"	MIDDLE KITTANNING	297	1	2	1	6.36	34.19	50.96	8.49	.51	5.40	69.25	1.43	14.92	6919	12454	7
					2		36.51	54.42	9.07	.54	5.01	73.95	1.53	9.90	7389	13300	
					3		40.15	59.85		.59	5.51	81.33	1.68	10.89	8126	14626	
					4		39.56	60.44							8201	14762	
					5	7.02	36.79	56.19							7625	13725	
DOVER	UPPER FREEPORT	488	1	2	1	8.11	37.44	50.11	4.34	1.21	5.62	62.32	1.23	25.28	6885	12393	29
					2		40.74	54.53	4.73	1.32	5.14	67.82	1.34	19.65	7493	13487	
					3		42.76	57.24		1.39	5.40	71.18	1.41	20.62	7865	14156	
					4		42.30	57.70							7918	14252	
					5	8.57	38.68	52.75							7238	13030	
"	"	492	1	2	1	6.97	39.68	47.35	6.10	2.78					6936	12485	30
					2		42.54	50.90	6.56	2.99					7458	13425	
					3		45.53	54.47		3.20					7982	14368	
					4		44.72	55.28							8081	14545	
					5	7.59	41.33	51.08							7465	13437	
"	MIDDLE KITTANNING	299	1	2	1	7.14	34.22	51.92	6.72	1.65	5.56	69.32	1.30	15.45	6863	12353	2
					2		36.85	55.91	7.24	1.78	5.14	74.65	1.39	9.80	7390	13302	
					3		39.73	60.27		1.92	5.54	80.48	1.50	10.56	7967	14340	
					4		38.99	61.01							8049	14488	
					5	7.77	35.96	56.27							7423	13361	
"	"	486 A	1	1	1	9.3	35.4	50.0	5.3	.9					6850	12330	30
					2		39.0	55.1	5.9	1.0					7552	13594	
					3		41.4	58.6		1.1					8026	14446	
					4		40.9	59.1							8078	14540	
					5	9.9	36.9	53.2							7278	13100	
"	"	486 B	1	1	1	8.8	35.5	50.3	5.4	.6					6900	12420	30
					2		38.9	55.2	5.9	.7					7566	13618	
					3		41.3	58.7		.7					8040	14472	
					4		41.0	59.0							8094	14570	
					5	9.4	37.1	53.5							7333	13200	
"	"	486 C	1	1	1	9.3	35.4	48.7	6.1	.8					6717	12090	30
					2		39.2	54.0	6.8	.9					7447	13404	
					3		42.1	57.9		1.0					7990	14382	
					4		41.6	58.4							8050	14490	
					5	10.5	37.2	52.3							7200	12960	
"	"	486 D[6]	1	2	1	6.02	39.28	49.74	4.96	.81	4.41	71.32	.98	17.52	7067	12720	30
					2		41.80	52.93	5.27	.86	3.98	75.88	1.04	12.97	7518	13532	
					3		44.13	55.87		.91	4.20	80.10	1.10	13.69	7936	14285	
					4		43.73	56.27							7986	14375	
					5	6.39	40.94	52.67							7478	13460	
"	"	486 K	1	1	1	8.5	35.3	50.0	6.1	.8	5.6	69.4	1.4	16.7	6817	12270	30
					2		38.6	54.8	6.6	.9	5.1	75.9	1.5	10.0	7456	13420	
					3		41.3	58.7		1.0	5.4	81.3	1.7	10.6	7989	14380	
					4		40.9	59.1							8056	14500	
					5	9.3	37.0	53.7							7306	13150	
"	"	606 1	3	3	1	4.11	36.87	51.94	7.08	.68					6962	12532	54
					2		38.45	54.17	7.38	.71					7260	13069	
					3		41.51	58.49		.77					7838	14110	
					4		41.00	59.00							7902	14223	
					5	4.47	39.17	56.36							7549	13588	
"	"	606 2	3	3	1	3.33	34.55	45.18	16.94	2.11					6197	11156	54
					2		35.74	46.74	17.52	2.18					6410	11540	
					3		43.33	56.67		2.64					7772	13991	
					4		41.90	58.10							7950	14310	
					5	4.13	40.17	55.70							7622	13720	
"	"	606 3	3	3	1	2.77	39.08	40.86	17.29	3.48					6267	11281	54
					2		40.19	42.03	17.78	3.58					6446	11602	
					3		48.88	51.12		4.35					7840	14111	
					4		47.36	52.64							8051	14491	
					5	3.49	45.71	50.80							7770	13986	
"	"	606 9	3	3	1	3.43	36.73	46.02	13.82	1.96					6455	11620	54
					2		38.03	47.66	14.31	2.03					6684	12033	
					3		44.38	55.62		2.37					7800	14042	
					4		43.24	56.76							7945	14301	
					5	4.08	41.48	54.44							7621	13717	
LODI	PITTSBURGH	274 1	1	2	1	8.52	39.15	42.44	9.89	3.06	5.41	64.19	1.60	15.85	6442	11595	28
					2		42.79	46.40	10.81	3.34	4.87	70.17	1.75	9.06	7042	12675	
					3		47.98	52.02		3.74	5.46	78.68	1.96	10.16	7896	14211	
					4		46.93	53.07							8034	14462	
					5	9.72	42.38	47.90							7253	13056	

Township	Seam	File number (1)	Kind (2)	Source (3)	Condition (4)	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
ATHENS COUNTY (CON.)																	
LODI	PITTSBURGH	274 2	1	2	1	673	4120	4099	1108	278	534	6457	113	1510	6500	11700	28
					2		4417	4395	1188	298	492	6923	121	978	6969	12544	
					3		5012	4988		338	558	7857	137	1110	7909	14235	
					4		4914	5086							8051	14492	
					5	778	4532	4690							7425	13365	
TRIMBLE	UPPER FREEPORT	489	1	2	1	678	4087	4587	648	246	534	6007	91	2474	6842	12315	29
					2		4384	4921	695	264	493	6444	98	2006	7339	13211	
					3		4711	5289		284	530	6925	105	2156	7887	14198	
					4		4638	5362							7981	14366	
					5	740	4295	4965							7391	13303	
"	"	491	1	2	1	626	4119	4656	599	227	483	6963	110	1618	7016	12629	29
					2		4394	4967	639	242	441	7428	117	1133	7486	13475	
					3		4694	5306		259	471	7935	125	1210	7997	14395	
					4		4627	5373							8084	14552	
					5	678	4314	5008							7534	13562	
"	"	526 A	1	1	1	69	405	444	82	51	55	664	12	136	6739	12130	48
					2		435	477	88	55	51	713	13	80	7239	13030	
					3		478	522		61	56	782	14	87	7938	14290	
					4		465	535							8100	14580	
					5	78	428	494							7467	13440	
"	"	526 B	1	1	1	66	402	456	76	52	55	673	12	132	6800	12240	48
					2		430	489	81	56	52	721	13	77	7278	13100	
					3		468	532		61	56	785	14	84	7919	14270	
					4		456	544							8083	14550	
					5	74	422	504							7483	13470	
"	MIDDLE KITTANNING	295	1	2	1	728	3238	5361	673	86	545	6946	134	1616	6894	12409	2
					2		3492	5782	726	93	500	7491	145	1045	7435	13383	
					3		3765	6235		100	539	8078	156	1127	8017	14431	
					4		3706	6294							8084	14552	
					5	789	3414	5797							7447	13404	
WATERLOO	"	293	1	2	1	670	3536	5119	675	228	549	6921	118	1509	6921	12458	2
					2		3790	5487	723	244	509	7418	126	980	7418	13352	
					3		4085	5915		263	549	7996	136	1056	7996	14393	
					4		4001	5999							8091	14563	
					5	733	3707	5560							7498	13497	
"	"	294	1	2	1	680	3690	4825	805	214	549	6740	137	1555	6794	12229	2
					2		3959	5177	864	230	507	7232	147	1020	7290	13122	
					3		4333	5667		252	555	7916	161	1116	7979	14363	
					4		4248	5752							8083	14549	
					5	754	3928	5318							7472	13450	
YORK	UPPER FREEPORT	528 1	1	1	1	83	395	478	44	19	58	701	13	165	6944	12500	48
					2		430	522	48	21	53	765	14	99	7572	13630	
					3		452	548		22	55	803	15	105	7954	14310	
					4		446	554							8022	14440	
					5	88	408	504							7316	13168	
"	"	528 2	1	1	1	87	354	457	102	22	55	644	12	165	6372	11470	48
					2		388	501	111	24	49	706	13	97	6978	12560	
					3		437	563		27	55	794	15	109	7849	14130	
					4		426	574							7972	14350	
					5	99	384	517							7190	12942	
"	"	528 3	1	1	1	49	353	445	153	55	48	604	12	128	6133	11040	48
					2		371	469	160	57	45	635	13	90	6450	11610	
					3		442	558		68	54	757	15	106	7678	13830	
					4		421	579							7906	14230	
					5	61	396	543							7434	13381	
"	LOWER FREEPORT	524 1	1	1	1	54	406	456	84	29	55	679	13	140	6822	12280	48
					2		429	482	89	30	52	718	14	97	7211	12980	
					3		471	529		33	57	788	15	107	7915	14240	
					4		462	538							8032	14458	
					5	60	434	506							7547	13584	
"	"	524 2	1	1	1	53	413	467	67	29	55	695	12	142	7000	12600	48
					2		436	493	71	31	52	735	13	98	7394	13310	
					3		470	530		33	56	791	14	106	7959	14330	
					4		461	539							8064	14516	
					5	58	434	508							7589	13661	
"	MIDDLE KITTANNING	485	1	2	1	740	3928	4792	540	97	447	6985	98	1833	7029	12652	30
					2		4242	5175	583	104	395	7544	105	1269	7591	13663	
					3		4505	5495		110	419	8011	112	1348	8061	14509	
					4		4460	5540							8119	14615	
					5	790	4108	5102							7478	13460	
BELMONT COUNTY																	
COLERAIN	WAYNESBURG	214	1	2	1	527	3742	4261	1470	219	497	6445	144	1225	6434	11581	27
					2		3950	4498	1552	231	462	6804	152	799	6792	12225	
					3		4676	5324		273	547	8054	180	946	8040	14471	
					4		4555	5445							8207	14773	
					5	636	4265	5099							7686	13835	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								BELMONT COUNTY (CON.)									
COLERAIN	PITTSBURGH	273	1	2	1	379	3637	5084	900	416	514	7041	109	1020	7145	12861	7
					2		3780	5284	936	432	491	7318	113	710	7426	13367	
					3		4170	5830		477	542	8073	125	783	8193	14747	
					4		4036	5964							8348	15027	
					5	431	3862	5707							7989	14380	
FLUSHING	MEIGS CREEK	149	1	1	1	463	3384	5250	903	218							6
					2		3548	5505	947	229							
					3		3919	6081		253							
					4		3819	6181									
					5	520	3621	5859									
"	"	177	1	1	1	551	3595	4989	865	231							6
					2		3805	5280	915	244							
					3		4188	5812		269							
					4		4094	5906									
					5	616	3841	5543									
"	"	423	1	2	1	498	3330	4890	1282	241	495	6631	119	1232	6652	11974	7
					2		3505	5146	1349	253	463	6979	125	831	7001	12602	
					3		4052	5948		292	535	8068	144	961	8093	14567	
					4		3922	6078							8247	14845	
					5	587	3691	5722							7763	13973	
"	PITTSBURGH	272	1	2	1	423	3634	5022	921	417	514	6875	109	1164	7003	12605	7
					2		3794	5244	962	435	488	7178	114	823	7312	13162	
					3		4198	5802		481	540	7942	126	911	8090	14563	
					4		4062	5938							8246	14842	
					5	482	3867	5651							7848	14126	
"	"	574	1	1	1	19	392	495	94	47					7194	12950	23
					2		399	505	96	48					7328	13190	
					3		441	559		53					8106	14591	
					4		428	572							8270	14886	
					5	22	419	559							8095	14571	
GOSHEN	WAYNESBURG	213	1	1	1	431	3532	4415	1622	353	498	6410	120	997	6447	11605	14
					2		3691	4614	1695	369	470	6698	125	643	6737	12127	
					3		4444	5556		444	566	8065	151	774	8112	14602	
					4		4278	5722							8328	14991	
					5	535	4049	5416							7883	14190	
"	UNIONTOWN	155	1	1	1	470	3421	4575	1534	285	495	6371	133	1182	6479	11662	14
					2		3590	4800	1610	299	465	6685	140	801	6799	12238	
					3		4279	5721		356	554	7968	167	955	8104	14586	
					4		4127	5873							8294	14930	
					5	574	3890	5536							7817	14071	
"	"	216	1	2	1	83	4121	4429	1367	259					6747	12145	26
					2		4156	4466	1378	261					6803	12246	
					3		4820	5180		303					7890	14203	
					4		4710	5290							8043	14478	
					5	99	4663	5238							7964	14336	
"	MEIGS CREEK	148	1	1	1	423	3641	4791	1145	316							6
					2		3802	5002	1196	330							
					3		4318	5682		375							
					4		4192	5808									
					5	492	3986	5522									
"	"	422	1	2	1	340	3572	4594	1494	439	486	6477	108	996	6578	11840	7
					2		3698	4756	1546	454	464	6705	112	719	6809	12256	
					3		4374	5626		537	549	7932	132	850	8054	14497	
					4		4199	5801							8270	14886	
					5	417	4024	5559							7926	14267	
KIRKWOOD	PITTSBURGH	271	1	2	1	375	3799	4742	1084	476	509	6741	111	1079	6865	12357	7
					2		3947	4927	1126	495	485	7004	115	775	7132	12838	
					3		4448	5552		558	547	7892	130	873	8037	14467	
					4		4299	5701							8218	14792	
					5	438	4110	5452							7858	14145	
MEAD	WAYNESBURG	212	1	2	1	351	3768	4194	1687	359	470	6318	125	1041	6320	11377	27
					2		3905	4347	1748	372	447	6548	129	756	6550	11791	
					3		4732	5268		451	542	7935	156	916	7937	14289	
					4		4573	5427							8153	14676	
					5	440	4372	5188							7795	14031	
"	FISHPOT	351	2	2	1	254	4081	4092	1573	500					6522	11739	26
					2		4187	4199	1614	513					6692	12045	
					3		4993	5007		612					7980	14363	
					4		4831	5169							8212	14782	
					5	316	4679	5005							7952	14314	
"	PITTSBURGH	270 A	1	2	1	291	3794	5115	800	431	511	7295	104	859	7340	13212	7
					2		3908	5268	824	444	493	7513	107	619	7560	13608	
					3		4259	5741		484	537	8187	117	675	8239	14830	
					4		4133	5867							8388	15098	
					5	327	3998	5675							8114	14605	
"	"	270 B	1	2	1	184	3898	4664	1254	482					7005	12609	5
					2		3971	4751	1278	491					7136	12845	
					3		4553	5447		563					8182	14727	
					4		4398	5602							8383	15090	
					5	220	4301	5479							8199	14758	

Township	Seam	File number (1)	Kind (2)	Source (3)	Condition (4)	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
BELMONT COUNTY (CON.)																	
PEASE	MEIGS CREEK	421	1	2	1	4.55	36.19	42.97	16.19	3.13	4.72	62.63	1.26	12.07	6265	11278	27
					2		37.95	45.07	16.98	3.28	4.41	65.68	1.32	8.33	6571	11828	
					3		45.71	54.29		3.95	5.31	79.12	1.59	10.03	7915	14247	
					4		44.18	55.82							8114	14606	
					5	5.76	41.64	52.60							7647	13765	
"	PITTSBURGH	158 A	1	1	1	4.0	39.6	48.3	8.1	3.4					7222	13000	20
					2		41.3	50.3	8.4	3.5					7523	13541	
					3		45.1	54.9		3.8					8213	14783	
					4		44.1	55.9							8343	15017	
					5	4.6	42.0	53.5							7974	14354	
"	"	158 B	1	1	1	3.9	38.9	48.0	9.2	3.6					7144	12860	20
					2		40.5	49.9	9.6	3.7					7434	13381	
					3		44.8	55.2		4.1					8223	14802	
					4		43.7	56.3							8369	15064	
					5	4.4	41.7	53.9							7997	14395	
"	"	158 C	1	1	1	3.9	38.7	49.3	8.1	3.3					7244	13040	20
					2		40.3	51.3	8.4	3.4					7538	13569	
					3		44.0	56.0		3.7					8229	14813	
					4		43.0	57.0							8358	15045	
					5	4.4	41.0	54.6							7998	14396	
"	"	158 K	1	1	1	3.9	39.6	48.0	8.5	3.4	5.3	71.2	1.3	10.3	7200	12960	20
					2		41.2	49.9	8.9	3.6	5.0	74.1	1.4	7.0	7494	13490	
					3		45.2	54.8		3.9	5.5	81.3	1.5	7.8	8222	14800	
					4		44.2	55.8							8362	15051	
					5	4.4	42.2	53.4							7988	14379	
"	"	269	1	2	1	3.9	36.8	51.9	7.6	2.9	5.2	71.4	1.4	11.2	7217	12991	7
					2		38.1	53.7	8.1	3.0	5.0	73.9	1.2	8.5	7470	13446	
					3		41.5	58.5		3.4	5.5	80.5	1.3	9.1	8132	14637	
					4		40.9	59.1							8249	14849	
					5	3.7	38.9	57.4							7938	14289	
PULTNEY	MEIGS CREEK	419	1	2	1	3.8	38.4	43.9	13.2	2.7					6643	11958	27
					2		40.4	45.7	13.6	2.8					6911	12441	
					3		46.9	53.1		3.2					8023	14443	
					4		45.7	54.3							8186	14734	
					5	4.6	43.6	51.8							7808	14054	
"	"	420	1	2	1	4.3	39.5	42.7	13.2	3.3	5.0	65.6	1.2	10.9	6584	11852	27
					2		41.2	44.0	14.1	3.5	4.7	68.4	1.2	7.6	6868	12363	
					3		48.2	51.8		4.1	5.5	79.9	1.4	8.8	8024	14444	
					4		46.9	53.1							8207	14772	
					5	4.9	44.6	50.5							7799	14039	
"	PITTSBURGH	160 A	1	1	1	3.9	38.7	49.1	8.0	3.4					7279	13102	5
					2		40.3	51.2	8.4	3.6					7582	13648	
					3		44.0	56.0		3.9					8277	14900	
					4		43.0	57.0							8413	15143	
					5	4.6	41.1	54.4							8037	14466	
"	"	160 B	1	1	1	4.0	39.4	50.0	6.4	3.3							5
					2		41.1	52.1	6.7	3.4							
					3		44.0	56.0		3.7							
					4		43.1	56.9									
					5	4.5	41.2	54.3									
"	"	268	1	2	1	3.8	37.1	50.0	8.9	4.2	5.2	70.5	1.2	9.8	7103	12785	7
					2		38.6	52.0	9.3	4.4	5.0	73.3	1.2	6.5	7383	13289	
					3		42.6	57.4		4.9	5.5	80.8	1.3	7.3	8140	14652	
					4		41.8	58.2							8295	14931	
					5	4.3	39.5	56.2							7938	14288	
"	"	575 A	1	1	1	3.3	40.8	49.1	6.7	3.5							6
					2		42.2	50.8	7.0	3.6							
					3		45.3	54.7		3.9							
					4		44.3	55.7									
					5	3.6	42.8	53.4									
"	"	575 B	1	1	1	3.1	40.7	50.1	6.0	3.4					7553	13595	6
					2		42.0	51.7	6.2	3.5					7795	14031	
					3		44.8	55.2		3.7					8312	14962	
					4		43.9	56.0							8427	15168	
					5	3.8	42.4	54.1							8141	14654	
"	"	575 C	1	2	1	3.5	38.5	50.9	6.8	3.7	5.4	72.0	1.1	10.7	7325	13185	7
					2		40.0	52.8	7.1	3.9	5.2	74.6	1.2	7.8	7591	13664	
					3		43.1	56.9		4.2	5.6	80.4	1.3	8.4	8172	14709	
					4		42.6	57.4							8298	14936	
					5	3.8	40.3	55.9							7977	14358	
RICHLAND	WAYNESBURG	211	1	2	1	3.8	37.3	45.8	13.0	1.7					6678	12020	27
					2		38.7	47.6	13.5	1.8					6933	12479	
					3		44.8	55.2		2.1					8022	14438	
					4		43.3	56.7							8160	14688	
					5	4.3	41.9	53.7							7806	14051	
"	MEIGS CREEK	417	1	2	1	5.5	38.1	44.0	12.3	2.6					6642	11956	27
					2		40.4	46.5	13.0	2.7					7029	12653	
					3		46.4	53.6		3.1					8081	14547	
					4		45.3	54.7							8236	14824	
					5	6.4	42.3	51.3							7703	13866	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B t u	
BELMONT COUNTY (CON.)																	
RICHLAND	MEIGS CREEK	418	1	2	1	457	3986	4326	1281	336					6672	12010	27
					2		4181	4538	1281	352					6999	12598	
					3		4795	5205		404					8027	14449	
					4		4675	5325							8193	14748	
					5	550	4418	5032							7743	13937	
"	"	600	1	3	1	314	3599	4411	1676	321	480	6417	101	1005	6415	11547	53
					2		3716	4554	1730	332	460	6625	104	749	6623	11921	
					3		4493	5507		401	556	8011	126	906	8008	14415	
					4		4333	5667							8216	14788	
					5	392	4164	5444							7894	14209	
"	PITTSBURGH	500 A	1	1	1	33	385	496	86	33					7239	13030	40
					2		398	513	89	34					7483	13470	
					3		437	563		37					8217	14790	
					4		426	574							8350	15030	
					5	37	411	552							8039	14470	
"	"	500 B	1	1	1	32	387	479	102	36					7100	12780	40
					2		400	495	105	37					7339	13210	
					3		447	553		41					8200	14760	
					4		434	565							8356	15040	
					5	37	419	544							8044	14480	
"	"	500 C	1	1	1	35	375	483	106	33					7050	12690	40
					2		389	501	110	34					7317	13170	
					3		437	563		38					8217	14790	
					4		425	575							8372	15070	
					5	42	407	551							8022	14440	
SMITH	WAYNESBURG	209	1	2	1	178	3916	4365	1541	268	487	6515	118	1071	6505	11709	26
					2		3987	4444	1569	273	475	6633	120	930	6623	11921	
					3		4729	5271		324	563	7868	142	1103	7856	14139	
					4		4601	5399							8028	14450	
					5	217	4501	5282							7853	14136	
"	"	210	1	2	1	572	3586	4431	1411	250					6439	11590	27
					2		3803	4701	1496	265					6830	12293	
					3		4472	5528		312					8032	14456	
					4		4342	5658							8200	14760	
					5	686	4045	5269							7638	13749	
"	MEIGS CREEK	416	1	2	1	352	3474	4990	1184	367	502	6736	105	1106	6884	12391	7
					2		3601	5172	1227	380	480	6982	109	822	7135	12843	
					3		4105	5895		433	547	7959	124	937	8133	14639	
					4		3958	6042							8303	14946	
					5	413	3794	5793							7961	14329	
"	PITTSBURGH	265	1	2	1	600	4119	4399	882	432	576	6902	116	1092	6990	12583	27
					2		4382	4680	938	460	542	7342	123	595	7436	13386	
					3		4836	5164		508	598	8101	136	657	8206	14772	
					4		4721	5279							8368	15063	
					5	681	4399	4920							7799	14038	
"	"	266	1	2	1	321	3682	5271	726	428	514	7149	106	1077	7297	13135	7
					2		3804	5446	750	442	495	7386	109	818	7539	13570	
					3		4112	5888		478	535	7985	118	884	8150	14670	
					4		3987	6013							8289	14920	
					5	367	3845	5798							7993	14388	
SOMERSET	WAYNESBURG	153	1	1	1	446	3660	4419	1475	302	510	6532	116	1065	6553	11795	14
					2		3831	4625	1544	316	481	6837	121	701	6859	12346	
					3		4531	5469		374	569	8085	143	829	8111	14600	
					4		4389	5611							8299	14939	
					5	541	4152	5307							7850	14130	
"	PITTSBURGH	264 A	1	2	1	408	3708	4823	1061	495	489	6877	110	968	6931	12476	7
					2		3866	5028	1106	516	463	7169	115	631	7226	13006	
					3		4347	5653		580	521	8061	129	709	8125	14623	
					4		4191	5809							8311	14959	
					5	475	3992	5533							7916	14249	
"	"	264 B	1	1	1	372	4101	4578	949	457					7089	12760	14
					2		4259	4755	986	475					7363	13253	
					3		4725	5275		527					8168	14703	
					4		4600	5400							8336	15005	
					5	426	4405	5169							7981	14365	
UNION																	
"	MEIGS CREEK	414	1	2	1	417	3509	5114	960	311	497	6990	109	1133	7001	12602	7
					2		3652	5336	1002	324	470	7294	114	796	7306	13150	
					3		4070	5930		360	522	8106	127	885	8120	14614	
					4		3950	6050							8256	14861	
					5	474	3763	5763							7864	14156	
"	"	415	1	2	1	431	3247	5154	1168	194	509	6832	111	1186	6837	12307	7
					2		3393	5386	1221	203	482	7140	115	839	7145	12861	
					3		3865	6135		231	549	8133	131	956	8139	14650	
					4		3751	6249							8272	14889	
					5	499	3564	5937							7858	14145	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
BELMONT COUNTY (CON.)																	
UNION	PITTSBURGH	262	1	2	1	4.46	36.00	48.78	10.76	4.45	4.85	68.24	1.10	10.60	6903	12425	7
					2		37.68	51.06	11.26	4.66	4.56	71.42	1.15	6.95	7225	13005	
					3		42.46	57.54		5.25	5.14	80.48	1.30	7.83	8142	14655	
					4		40.94	59.06							8321	14977	
					5	5.19	38.82	55.99							7889	14200	
"	"	263	1	2	1	4.22	41.86	44.00	9.92	4.56					6973	12551	27
					2		43.70	45.94	10.36	4.76					7280	13104	
					3		48.75	51.25		5.31					8121	14618	
					4		47.53	52.47							8293	14927	
					5	4.86	45.22	49.92							7889	14201	
WARREN	MEIGS CREEK	157	1	1	1	4.34	38.95	45.60	11.21	3.65	5.31	68.17	1.20	10.46	6890	12402	14
					2		40.72	47.56	11.72	3.82	5.05	71.26	1.25	6.90	7203	12965	
					3		46.13	53.87		4.33	5.72	80.71	1.42	7.82	8159	14686	
					4		44.88	55.12							8326	14986	
					5	5.05	42.61	52.34							7904	14228	
"	"	413	1	2	1	4.47	35.31	47.15	13.07	3.27	4.99	65.83	1.13	11.71	6668	12002	7
					2		36.96	49.36	13.68	3.42	4.71	68.91	1.18	8.10	6980	12564	
					3		42.82	57.18		3.96	5.46	79.84	1.36	9.38	8086	14555	
					4		41.39	58.61							8261	14870	
					5	5.32	39.19	55.49							7822	14079	
"	PITTSBURGH	151 A	1	1	1	4.13	42.71	43.83	9.33	4.46					7074	12733	14
					2		44.55	45.72	9.73	4.65					7379	13282	
					3		49.35	50.65		5.15					8174	14714	
					4		48.21	51.79							8339	15011	
					5	4.72	45.94	49.34							7946	14302	
"	"	151 B	1	1	1	3.72	43.25	44.40	8.63	4.45					7193	12947	14
					2		44.92	46.12	8.96	4.62					7471	13447	
					3		49.34	50.66		5.07					8206	14770	
					4		48.25	51.75							8364	15055	
					5	4.22	46.21	49.57							8012	14422	
"	"	151 K	1	1	1	3.88	43.09	43.96	9.07	4.36	5.46	69.97	1.27	9.87	7132	12838	14
					2		44.83	45.73	9.44	4.64	5.23	72.80	1.32	6.67	7420	13356	
					3		49.50	50.50		5.01	5.78	80.38	1.46	7.37	8193	14748	
					4		48.40	51.60							8354	15038	
					5	4.42	46.26	49.32							7985	14373	
"	"	261	1	2	1	4.47	37.53	46.99	11.01	4.67	5.17	67.64	1.08	10.43	6875	12375	7
					2		39.29	49.19	11.52	4.89	4.90	70.80	1.13	6.76	7196	12953	
					3		44.41	55.59		5.53	5.54	80.01	1.28	7.64	8133	14639	
					4		42.90	57.10							8319	14974	
					5	5.23	40.66	54.11							7886	14194	
WASHINGTON	WASHINGTON	152	1	1	1	4.08	33.69	41.23	21.00	2.86	4.76	59.93	1.09	10.36	6012	10822	14
					2		35.12	42.98	21.90	2.98	4.49	62.48	1.14	7.01	6268	11282	
					3		44.97	55.03		3.82	5.75	80.00	1.46	8.97	8026	14446	
					4		43.07	56.93							8279	14902	
					5	5.39	40.75	53.86							7833	14098	
"	WAYNESBURG	164	1	1	1	4.67	36.81	44.17	14.45	2.59					6574	11833	14
					2		38.67	46.29	15.14	2.71					6889	12400	
					3		45.45	54.55		3.19					8118	14612	
					4		44.15	55.85							8293	14928	
					5	5.51	41.72	52.77							7837	14106	
"	MEIGS CREEK	165	1	1	1	3.51	37.15	41.53	17.81	4.05					6396	11513	14
					2		38.50	43.04	18.46	4.20					6629	11932	
					3		47.22	52.78		5.15					8130	14633	
					4		45.46	54.54							8376	15076	
					5	4.47	43.42	52.11							8001	14401	
"	PITTSBURGH	260	1	2	1	2.79	37.88	49.91	9.42	5.09	5.25	69.76	1.09	9.39	7215	12987	7
					2		38.97	51.34	9.69	5.24	5.08	71.76	1.12	7.11	7423	13360	
					3		43.15	56.85		5.80	5.63	79.46	1.24	7.87	8218	14793	
					4		41.66	58.34							8397	15115	
					5	3.21	40.32	56.47							8128	14631	
WAYNE	WAYNESBURG	154	1	1	1	4.40	37.10	43.06	15.44	2.90					6476	11657	14
					2		38.81	45.04	16.15	3.03					6774	12193	
					3		46.29	53.71		3.61					8079	14541	
					4		44.88	55.12							8270	14886	
					5	5.38	42.47	52.15							7825	14085	
"	"	208	2	2	1	5.59	38.38	39.70	16.33	3.20					6110	10999	26
					2		40.66	42.05	17.29	3.39					6472	11650	
					3		49.16	50.84		4.10					7825	14085	
					4		47.72	52.28							8027	14448	
					5	6.94	44.40	48.66							7471	13447	
"	MEIGS CREEK	412	1	2	1	4.21	39.51	43.86	12.42	2.81					6786	12214	27
					2		41.25	45.78	12.97	2.94					7084	12751	
					3		47.40	52.60		3.38					8140	14651	
					4		46.27	53.73							8299	14938	
					5	4.95	43.97	51.08							7887	14197	
WHEELING	"	411[7]	1	2	1	7.52	31.75	49.49	11.24	2.11	5.14	66.41	1.11	13.99	6589	11860	7
					2		34.33	53.52	12.15	2.28	4.65	71.81	1.21	7.90	7125	12824	
					3		39.08	60.92		2.60	5.29	81.74	1.38	8.99	8110	14598	
					4		37.89	62.11							8246	14843	
					5	8.67	34.61	56.72							7532	13558	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								BELMONT COUNTY (CON.)									
WHEELING	MEIGS CREEK	585 1[8]	1	3	1	2 35	31 43	41 81	24 41	2 34					57 57	10363	49
					2		32 19	42 81	25 00	2 40					58 97	10615	
					3		42 92	57 08		3 20					78 63	14153	
					4		40 78	59 22							81 34	14641	
					5	3 25	39 45	57 30							78 68	14162	
"	"	585 2[8]	1	3	1	2 45	34 57	52 73	10 25	2 61					69 37	12488	49
					2		35 44	54 05	10 51	2 68					71 11	12801	
					3		39 60	60 40		2 99					79 46	14304	
					4		38 46	61 54							80 73	14531	
					5	2 80	37 38	59 32							78 47	14124	
"	"	585 3[8]	1	3	1	2 42	34 63	52 33	10 72	1 93					69 62	12533	49
					2		35 38	53 63	10 99	1 98					71 35	12844	
					3		39 75	60 25		2 22					80 16	14430	
					4		38 73	61 27							81 34	14642	
					5	2 77	37 66	59 57							79 09	14236	
"	"	585 4[8]	1	3	1	2 19	39 45	49 59	8 77	3 35					71 49	12869	49
					2		40 33	50 70	8 97	3 43					73 09	13157	
					3		44 30	55 70		3 77					80 29	14453	
					4		43 25	56 75							81 58	14685	
					5	2 47	42 18	55 35							79 57	14322	
"	"	585 9[8]	1	3	1	2 37	34 76	49 41	13 46	2 45					67 10	12078	49
					2		35 60	50 61	13 79	2 61					68 72	12371	
					3		41 29	58 71		2 91					79 71	14350	
					4		40 00	60 00							81 26	14626	
					5	2 82	38 88	58 30							78 96	14213	
"	PITTSBURGH	150 A	1	1	1	3 96	38 09	48 91	9 04	4 25							6
					2		39 65	50 94	9 41	4 43							
					3		43 77	56 23		4 89							
					4		42 48	57 52									
					5	4 51	40 57	54 92									
"	"	150 B	1	1	1	4 13	39 22	48 69	7 96	4 15					72 71	13088	6
					2		40 91	50 79	8 30	4 30					75 84	13651	
					3		44 61	55 39		4 69					82 70	14887	
					4		43 45	56 55							84 18	15153	
					5	4 63	41 43	53 94							80 29	14453	
"	"	259[9]	1	2	1	4 25	33 53	51 87	10 35	3 95	5 19	68 17	1 09	11 25	69 03	12425	7
					2		35 02	54 17	10 81	4 13	4 93	71 19	1 14	7 80	72 09	12976	
					3		39 26	60 74		4 63	5 53	79 81	1 28	8 75	80 83	14549	
					4		37 77	62 23							82 44	14839	
					5	4 90	35 92	59 18							78 39	14111	
YORK	WAYNESBURG	207	1	2	1	2 84	40 07	43 75	13 34	4 91					65 26	11746	26
					2		41 24	45 03	13 73	5 06					67 16	12089	
					3		47 80	52 20		5 87					77 85	14013	
					4		46 27	53 73							79 81	14366	
					5	3 83	44 68	51 89							77 08	13874	
"	MEIGS CREEK	410	1	2	1	3 26	40 94	44 82	10 98	3 86	5 06	69 07	1 19	9 84	69 46	12502	27
					2		42 32	46 34	11 34	4 00	4 86	71 39	1 23	7 18	71 80	12923	
					3		47 73	52 27		4 51	5 48	80 52	1 39	8 10	80 98	14576	
					4		46 54	53 46							82 62	14872	
					5	3 79	44 78	51 43							79 50	14310	
"	PITTSBURGH	257	1	2	1	3 11	41 81	47 74	7 34	3 45					73 06	13152	27
					2		43 15	49 28	7 57	3 56					75 40	13574	
					3		46 68	53 32		3 85					81 58	14686	
					4		45 76	54 24							82 82	14907	
					5	3 45	44 18	52 37							79 97	14394	
"	"	258	1	2	1	2 26	42 63	48 43	6 68	3 18	5 20	74 24	1 40	9 30	74 56	13421	27
					2		43 62	49 55	6 83	3 26	5 06	75 95	1 43	7 47	76 28	13731	
					3		46 82	53 18		3 50	5 43	81 52	1 53	8 02	81 87	14738	
					4		45 99	54 01							82 99	14938	
					5	2 48	44 85	52 67							80 93	14568	
								CARROLL COUNTY									
LEE	HARLEM	316	1	2	1	7 07	36 55	50 34	6 04	5 7	5 49	71 04	1 22	15 64	70 25	12645	26
					2		39 33	54 17	6 50	6 1	5 08	76 44	1 31	10 06	75 59	13606	
					3		42 06	57 94		6 5	5 43	81 76	1 40	10 76	80 84	14552	
					4		41 63	58 37							81 41	14653	
					5	7 59	38 47	53 94							75 23	13542	
ORANGE	MIDDLE KITTANNING	296	1	2	1	3 76	39 11	50 34	6 79	3 06	5 36	71 99	1 40	11 40	72 38	13028	2
					2		40 54	52 31	7 05	3 18	5 13	74 80	1 46	8 38	75 21	13537	
					3		43 72	56 28		3 42	5 52	80 47	1 57	9 02	80 91	14564	
					4		42 81	57 19							82 00	14760	
					5	4 13	41 05	54 82							78 62	14151	
WASHINGTON	LOWER KITTANNING	580		4	1	2 95	42 63	50 17	4 45	1 90					77 00	13860	
					2		43 72	51 69	4 59	1 96					79 34	14281	
					3		45 82	54 18		2 05					83 16	14968	
					4		45 30	54 70							83 86	15094	
					5	3 13	43 88	52 99							81 22	14620	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
COLUMBIANA COUNTY																	
CENTER	LOWER KITTANNING	314	1	2	1	2.53	43.66	46.24	7.57	5.02	5.38	70.64	1.13	10.26	7372	13270	21
					2		44.80	47.44	7.76	5.15	5.24	72.48	1.17	8.20	7564	13615	
					3		48.57	51.43		5.58	5.68	78.58	1.27	8.89	8200	14760	
					4		47.44	52.56							8358	15044	
					5	2.85	46.08	51.07							8121	14618	
KNOX	"	313	1	2	1	4.55	42.60	45.33	7.52	4.24	5.38	68.57	1.24	13.05	7119	12815	21
					2		44.53	47.50	7.87	4.44	5.11	71.84	1.30	9.44	7458	13425	
					3		48.44	51.56		4.82	5.55	77.97	1.41	10.25	8095	14572	
					4		47.41	52.59							8236	14825	
					5	5.08	45.01	49.91							7819	14074	
LIVERPOOL	MIDDLE KITTANNING	125	1	1	1	4.79	34.83	52.95	7.43	1.79	5.39	73.99	1.38	10.02	7329	13192	16
					2		36.58	55.62	7.80	1.88	5.10	77.71	1.45	6.06	7698	13856	
					3		39.57	60.33		2.04	5.53	84.29	1.57	6.57	8349	15028	
					4		38.88	61.12							8444	15200	
					5	5.26	36.84	57.90							8000	14400	
"	"	126	1	1	1	4.33	36.75	54.31	4.61	1.46					7589	13660	16
					2		38.41	56.77	4.82	1.53					7933	14279	
					3		40.36	59.64		1.61					8335	15002	
					4		39.82	60.18							8398	15117	
					5	4.60	37.99	57.41							8012	14421	
"	"	127	1	1	1	5.08	35.78	53.15	5.99	2.07					7412	13342	16
					2		37.69	56.00	6.31	2.18					7809	14056	
					3		40.23	59.77		2.33					8335	15003	
					4		39.48	60.52							8423	15162	
					5	5.50	37.31	57.19							7961	14329	
"	"	292	1	2	1	3.60	36.16	55.64	4.60	1.76	5.46	77.06	1.38	9.74	7789	14020	7
					2		37.51	57.72	4.77	1.83	5.25	79.94	1.43	6.78	8080	14544	
					3		39.39	60.61		1.92	5.51	83.95	1.50	7.12	8485	15272	
					4		38.78	61.22							8556	15401	
					5	3.83	37.30	58.87							8228	14811	
"	LOWER KITTANNING	140	1	1	1	2.56	41.73	43.99	11.62	8.03					7085	12753	16
					2		42.87	45.19	11.94	8.25					7278	13100	
					3		48.68	51.32		9.37					8265	14876	
					4		46.77	53.23							8537	15366	
					5	3.20	45.27	51.53							8264	14875	
MADISON	MAHONING	425	1	2	1	3.18	36.47	52.21	8.14	1.53	5.31	72.92	1.34	10.76	7347	13224	21
					2		37.67	53.92	8.41	1.58	5.13	75.31	1.39	8.18	7587	13657	
					3		41.13	58.87		1.73	5.60	82.22	1.52	8.93	8284	14911	
					4		40.38	59.62							8377	15079	
					5	3.52	38.96	57.52							8083	14549	
"	UPPER FREEPORT	132 A	1	1	1	3.37	37.89	51.68	7.06	2.92					7471	13448	16
					2		39.21	53.48	7.31	3.02					7731	13916	
					3		42.30	57.70		3.26					8341	15013	
					4		41.37	58.63							8455	15219	
					5	3.71	39.84	56.45							8142	14655	
"	"	132 B	1	1	1	3.77	38.32	49.93	7.98	3.65					7398	13316	16
					2		39.82	51.89	8.29	3.79					7688	13838	
					3		43.42	56.58		4.13					8383	15089	
					4		42.31	57.69							8523	15342	
					5	4.22	40.53	55.25							8164	14695	
"	"	132 K	1	1	1	3.60	37.80	51.22	7.38	3.21	5.35	73.68	1.85	8.53	7439	13390	16
					2		39.21	53.13	7.66	3.33	5.13	76.43	1.92	5.53	7716	13889	
					3		42.46	57.54		3.61	5.56	82.76	2.08	5.99	8356	15041	
					4		41.45	58.55							8481	15265	
					5	3.99	39.80	56.21							8142	14656	
"	"	344	1	2	1	2.45	36.97	49.95	10.63	3.80	5.07	69.39	1.21	9.90	7152	12874	21
					2		37.89	51.22	10.89	3.89	4.92	71.12	1.24	7.94	7331	13196	
					3		42.52	57.48		4.37	5.52	79.81	1.39	8.91	8227	14809	
					4		41.19	58.81							8389	15101	
					5	2.83	40.04	57.13							8153	14676	
MIDDLETON	MAHONING	424	1	2	1	3.22	36.76	52.38	7.64	1.98	5.26	73.10	1.42	10.60	7368	13263	21
					2		37.98	54.13	7.89	2.05	5.07	75.54	1.47	7.98	7614	13705	
					3		41.23	58.77		2.23	5.50	82.01	1.60	8.66	8266	14879	
					4		40.43	59.57							8364	15055	
					5	3.55	39.00	57.45							8067	14520	
"	"	547	1	4	1	4.15	36.20	47.15	12.50	2.06							99
					2		37.77	49.19	13.04	2.15							
					3		43.43	56.57		2.47							
					4		42.33	57.67									
					5	4.86	40.27	54.87									
"	UPPER FREEPORT	343	1	2	1	3.17	36.96	54.27	5.60	2.04	5.35	75.63	1.33	10.05	7674	13813	21
					2		38.17	56.04	5.79	2.11	5.16	78.11	1.37	7.46	7926	14266	
					3		40.52	59.48		2.24	5.48	82.91	1.45	7.92	8413	15143	
					4		39.81	60.19							8497	15294	
					5	3.41	38.46	58.13							8206	14770	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
COLUMBIANA COUNTY (CON.)																	
ST. CLAIR	UPPER FREEPORT	133	1	1	1	427	3643	4766	1164	304					6977	12559	16
					2		3805	4979	1216	318					7288	13118	
					3		4332	5668		362					8297	14934	
					4		4207	5793							8458	15225	
					5	498	3998	5504							8038	14468	
"	"	134	1	1	1	527	3628	4951	894	401					7118	12812	16
					2		3830	5226	944	423					7514	13525	
					3		4229	5771		467					8297	14935	
					4		4098	5902							8455	15219	
					5	598	3853	5549							7949	14309	
"	LOWER FREEPORT	129	1	1	1	358	3847	4748	1047	449	539	7004	156	805	7138	12848	16
					2		3990	4924	1086	466	518	7264	162	504	7403	13325	
					3		4476	5524		523	581	8149	182	565	8305	14948	
					4		4336	5664							8486	15275	
					5	415	4156	5429							8134	14641	
"	LOWER KITTANNING	136	1	1	1	403	3659	5303	625	261	546	7465	164	939	7496	13493	16
					2		3823	5526	651	272	522	7779	171	605	7811	14060	
					3		4089	5911		291	558	8321	183	647	8355	15039	
					4		4003	5997							8457	15222	
					5	439	3828	5733							8086	14554	
"	"	315	1	2	1	367	3768	5181	684	250	531	7313	120	1102	7414	13345	21
					2		3912	5378	710	260	509	7591	125	805	7696	13853	
					3		4211	5789		280	548	8170	135	867	8284	14912	
					4		4127	5873							8387	15096	
					5	402	3961	5637							8050	14490	
WASHINGTON	UPPER FREEPORT	342	1	2	1	342	3866	4918	874	361	517	7045	132	1071	7221	12998	21
					2		4003	5092	905	373	496	7294	136	796	7477	13459	
					3		4401	5599		410	545	8020	150	875	8221	14798	
					4		4289	5711							8363	15053	
					5	386	4123	5491							8039	14471	
WEST	"	341	1	2	1	718	3496	4891	895	252	515	6672	125	1541	6705	12069	21
					2		3766	5269	965	272	469	7188	134	972	7224	13003	
					3		4168	5832		301	519	7956	148	1076	7996	14392	
					4		4064	5936							8116	14608	
					5	807	3737	5456							7459	13427	
YELLOW CREEK	MAHONING	120	1	1	1	315	3932	5115	638	355	556	7535	135	781	7548	13586	16
					2		4060	5281	659	367	538	7780	139	517	7793	14027	
					3		4346	5654		393	576	8329	149	553	8343	15017	
					4		4249	5751							8464	15235	
					5	346	4101	5553							8172	14709	
"	UPPER FREEPORT	135	1	1	1	513	3801	4858	828	378					7200	12960	16
					2		4007	5120	873	398					7590	13662	
					3		4390	5610		436					8316	14969	
					4		4275	5725							8463	15233	
					5	577	4027	5396							7974	14353	
"	"	137	1	1	1	346	3674	4837	1093	428	524	6989	138	828	7073	12731	16
					2		3806	5062	1132	443	503	7239	143	540	7326	13187	
					3		5336	4664		500	567	8163	161	609	8261	14870	
					4		4146	5854							8441	15193	
					5	403	3979	5618							8101	14582	
"	"	141	1	1	1	343	3781	5128	748	286	553	7431	148	834	7425	13365	16
					2		3915	5310	775	296	533	7695	153	548	7689	13840	
					3		4244	5756		321	578	8341	166	594	8335	15003	
					4		4149	5851							8452	15213	
					5	380	3992	5628							8130	14634	
"	LOWER FREEPORT	130	1	1	1	594	3273	4981	1152	149	528	6830	135	1206	6726	12107	17
					2		3480	5295	1225	158	491	7262	144	720	7151	12872	
					3		3966	6034		180	560	8275	164	821	8149	14669	
					4		3864	6136							8274	14893	
					5	685	3598	5717							7707	13872	
"	MIDDLE KITTANNING	128	1	1	1	341	3466	5118	1075	70	522	7162	145	1026	7128	12830	16
					2		3588	5299	1113	72	501	7415	150	749	7380	13284	
					3		4037	5963		81	564	8343	169	843	8304	14948	
					4		3962	6038							8403	15126	
					5	389	3807	5804							8077	14539	
"	LOWER KITTANNING	142	1	1	1	267	3846	5019	868	571					7340	13212	16
					2		3951	5157	892	587					7541	13574	
					3		4338	5662		644					8280	14903	
					4		4183	5817							8467	15241	
					5	305	4056	5639							8209	14776	
"	"	143	1	1	1	446	4086	4973	495	352					7540	13572	16
					2		4277	5205	518	368					7892	14206	
					3		4511	5489		388					8323	14982	
					4		4426	5574							8432	15178	
					5	481	4212	5307							8027	14448	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
COSHOCTON COUNTY																	
ADAMS	MIDDLE KITTANNING	291	1	2	1	4.58	39.18	47.49	8.75	5.36	5.40	67.51	1.24	11.74	6878	12380	2
					2		41.06	49.77	9.17	5.62	5.12	70.75	1.30	8.04	7208	12974	
					3		45.21	54.79		6.19	5.64	77.89	1.43	8.85	7936	14284	
					4		43.77	56.23							8105	14589	
					5	5.23	41.48	53.29							7681	13826	
BEDFORD	BEDFORD	382	1	2	1	1.54	46.57	35.42	16.47	3.74	4.95	64.63	1.67	8.54	6591	11864	26
					2		47.29	35.97	16.74	3.80	4.86	65.61	1.70	7.29	6694	12049	
					3		56.80	43.20		4.56	5.84	78.80	2.04	8.76	8040	14472	
					4		55.66	44.34							8253	14855	
					5	1.92	54.59	43.49							8093	14568	
CLARK	MIDDLE KITTANNING	290	1	2	1	5.30	39.08	49.47	6.15	3.72	5.50	69.59	1.12	13.92	7084	12751	2
					2		41.27	52.24	6.49	3.93	5.18	73.48	1.18	9.74	7480	13464	
					3		44.13	55.87		4.20	5.54	78.58	1.26	10.42	7999	14398	
					4		43.13	56.87							8115	14607	
					5	5.80	40.63	53.57							7645	13761	
"	"	340	1	2	1	6.40	37.92	52.49	3.19	2.01	5.67	72.72	1.25	15.16	7325	13185	2
					2		40.51	56.08	3.41	2.15	5.30	77.69	1.33	10.12	7826	14086	
					3		41.94	58.06		2.23	5.49	80.42	1.38	10.48	8102	14583	
					4		41.39	58.61							8163	14693	
					5	6.71	38.61	54.68							7616	13708	
CRAWFORD	"	289	1	2	1	4.70	39.20	44.81	11.29	5.60	5.23	64.78	1.12	11.98	6594	11869	2
					2		41.13	47.02	11.85	5.88	4.94	67.97	1.18	8.18	6919	12454	
					3		46.66	53.34		6.67	5.60	77.11	1.34	9.28	7849	14128	
					4		45.05	54.95							8046	14482	
					5	5.55	42.55	51.90							7599	13678	
FRANKLIN	"	393	1	2	1	4.33	41.11	48.97	5.59	4.00	5.41	71.42	1.22	12.36	7269	13084	2
					2		42.97	51.19	5.84	4.18	5.15	74.65	1.28	8.90	7598	13676	
					3		45.64	54.36		4.44	5.47	79.28	1.36	9.45	8069	14524	
					4		44.58	55.32							8186	14735	
					5	4.72	42.57	52.71							7801	14041	
JACKSON	"	392	1	2	1	5.32	40.93	47.45	6.30	4.22	5.50	69.29	1.24	13.45	7086	12755	2
					2		43.23	50.12	6.55	4.46	5.19	73.18	1.31	9.21	7484	13471	
					3		46.31	53.69		4.78	5.56	78.39	1.40	9.87	8017	14431	
					4		45.28	54.72							8145	14661	
					5	5.85	42.63	51.52							7669	13804	
KEENE	"	391	1	2	1	5.40	39.92	49.60	5.08	3.18	5.58	70.90	1.24	14.02	7194	12949	2
					2		42.20	52.43	5.37	3.36	5.26	74.95	1.31	9.75	7605	13689	
					3		44.59	55.41		3.55	5.56	79.21	1.38	10.30	8037	14466	
					4		43.77	56.23							8134	14641	
					5	5.82	41.23	52.95							7660	13788	
LAFAYETTE	LOWER KITTANNING	390	1	2	1	5.60	34.69	46.43	13.28	4.87	4.95	61.59	1.08	14.23	6222	11200	2
					2		36.75	49.18	14.07	5.16	4.59	65.24	1.14	9.80	6591	11864	
					3		42.77	57.23		6.01	5.34	75.92	1.33	11.40	7670	13807	
					4		40.94	59.06							7866	14159	
					5	6.75	38.18	55.07							7336	13204	
LINTON	MIDDLE KITTANNING	388	1	2	1	4.37	40.97	49.30	5.36	3.61	5.56	71.34	1.28	12.85	7247	13045	2
					2		42.84	51.55	5.61	3.77	5.30	74.60	1.34	9.38	7578	13640	
					3		45.39	54.61		3.99	5.62	79.03	1.42	9.94	8028	14451	
					4		44.50	55.50							8134	14642	
					5	4.74	42.39	52.87							7749	13949	
"	"	389	1	2	1	10.93	34.00	48.43	6.64	2.03	5.37	63.08	1.15	21.73	6133	11039	2
					2		38.17	54.37	7.46	2.28	4.67	70.81	1.29	13.49	6885	12393	
					3		41.25	58.75		2.46	5.05	76.52	1.39	14.58	7440	13392	
					4		40.43	59.57							7522	13540	
					5	11.92	35.61	52.47							6626	11926	
OXFORD	"	387	1	2	1	4.44	40.71	50.40	4.45	3.54	5.53	72.65	1.35	12.48	7351	13231	2
					2		42.60	52.74	4.66	3.70	5.27	76.03	1.41	8.93	7693	13847	
					3		44.68	55.32		3.88	5.53	79.74	1.48	9.37	8069	14524	
					4		43.85	56.15							8167	14701	
					5	4.76	41.76	53.48							7777	13999	
VIRGINIA	"	386	1	2	1	5.12	38.99	48.87	7.02	3.87	5.45	69.49	1.20	12.97	7066	12719	2
					2		41.09	51.51	7.40	4.08	5.14	73.24	1.27	8.87	7447	13405	
					3		44.37	55.63		4.41	5.55	79.09	1.37	9.58	8042	14476	
					4		43.30	56.70							8170	14706	
					5	5.67	40.85	53.48							7707	13873	
WHITE EYES	"	472	1	2	1	5.32	37.39	48.69	8.60	4.36	5.32	67.41	1.18	13.13	6828	12290	2
					2		39.49	51.43	9.08	4.60	5.00	71.20	1.25	8.87	7212	12982	
					3		43.43	56.57		5.06	5.60	78.31	1.37	9.76	7932	14278	
					4		42.12	57.88							8082	14547	
					5	6.02	39.59	54.39							7594	13669	
"	"	484	1	2	1	4.50	38.73	50.80	5.97	3.63	5.53	70.94	1.30	12.63	7173	12911	2
					2		40.55	53.20	6.25	3.80	5.27	74.28	1.36	9.04	7511	13519	
					3		43.25	56.75		4.05	5.62	79.24	1.45	9.64	8012	14420	
					4		42.27	57.73							8123	14622	
					5	4.92	40.19	54.89							7724	13904	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
									GALLIA COUNTY								
CHESHIRE	REDSTONE	237	1	2	1	821	3423	4610	1146	218	548	6295	102	1691	6387	11497	7
					2		3729	5022	1249	237	498	6858	111	1047	6958	12524	
					3		4251	5739		271	569	7837	127	1196	7951	14312	
					4		4148	5852							8088	14559	
					5	960	3754	5296							7321	13177	
GREEN	PITTSBURGH	256	1	2	1	673	3434	4590	1303	437	511	6230	114	1405	6356	11441	7
					2		3682	4921	1397	468	468	6680	122	865	6814	12266	
					3		4280	5720		544	544	7765	142	1005	7920	14258	
					4		4109	5891							8118	14613	
					5	806	3777	5417							7464	13436	
GREENFIELD	MIDDLE KITTANNING	483	1	2	1	808	3753	4587	852	364	548	6571	118	1547	6717	12091	6
					2		4083	4990	927	396	498	7149	128	902	7307	13153	
					3		4500	5500		436	549	7880	141	994	8054	14497	
					4		4385	5615							8196	14753	
					5	910	3986	5104							7451	13412	
HARRISON	PITTSBURGH	254	1	2	1	783	3415	4826	976	389	518	6459	109	1549	6544	11779	7
					2		3705	5236	1059	422	468	7007	118	926	7099	12778	
					3		4144	5856		472	523	7837	132	1036	7940	14291	
					4		4002	5998							8096	14572	
					5	897	3643	5460							7371	13267	
"	"	255	1	2	1	698	3614	4785	903	521	524	6491	101	1460	6583	11849	7
					2		3885	5144	971	560	481	6977	108	903	7076	12737	
					3		4303	5697		620	533	7727	120	1000	7837	14107	
					4		4146	5854							8007	14412	
					5	799	3814	5387							7368	13262	
OHIO	"	253	1	2	1	580	3676	4738	1006	434	516	6494	110	1440	6551	11792	7
					2		3902	5030	1068	460	480	6894	117	981	6954	12517	
					3		4369	5631		515	537	7719	131	1098	7785	14014	
					4		4227	5773							7943	14298	
					5	669	3944	5387							7413	13343	
WALNUT	UPPER FREEPORT	339	1	2	1	752	3285	4714	1239	181	519	6348	128	1585	6371	11468	2
					2		3556	5103	1341	196	470	6871	139	983	6896	12413	
					3		4107	5893		226	543	7935	161	1135	7964	14335	
					4		3991	6009							8102	14584	
					5	890	3636	5474							7382	13288	
									GUERNSEY COUNTY								
CENTER	UPPER FREEPORT	147 A	1	1	1	580	3689	5073	658	262							5
					2		3916	5385	699	278							
					3		4210	5790		299							
					4		4123	5877									
					5	634	3862	5504									
"	"	147 B	1	1	1	628	3581	5061	730	355					7056	12701	5
					2		3821	5400	779	379					7529	13552	
					3		4144	5856		411					8165	14697	
					4		4030	5970							8294	14930	
					5	697	3749	5554							7717	13890	
"	"	337	1	2	1	647	3590	5135	578	113	541	7259	141	1368	7076	12736	25
					2		3838	5544	618	121	501	7761	151	848	7565	13617	
					3		4091	5909		129	534	8272	161	904	8063	14514	
					4		4036	5964							8128	14630	
					5	695	3756	5549							7563	13614	
MILLWOOD	PITTSBURGH	173 A	1	1	1	46	406	466	83	46	54	703	11	103	7111	12800	27
					2		425	488	87	49	52	736	12	64	7444	13400	
					3		465	535		53	57	807	13	70	8156	14680	
					4		454	546							8311	14960	
					5	51	430	519							7889	14200	
"	"	173 B	1	1	1	47	404	463	86	42					7072	12730	27
					2		424	485	91	44					7422	13360	
					3		466	534		49					8167	14700	
					4		454	546							8311	14960	
					5	53	430	517							7867	14160	
"	"	173 C	1	1	1	39	398	468	95	49	52	699	12	93	7028	12650	27
					2		415	486	99	51	50	727	12	61	7311	13160	
					3		460	540		56	55	807	14	68	8117	14610	
					4		446	554							8289	14920	
					5	45	425	529							7917	14250	
"	"	173 K	1	1	1	43	403	465	89	46	55	729	12	69	7072	12730	27
					2		421	486	93	48	52	761	13	33	7389	13300	
					3		464	536		53	58	840	14	35	8150	14670	
					4		452	548							8311	14960	
					5	49	430	521							7906	14230	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
								GUERNSEY COUNTY (CON.)									
MILLWOOD	PITTSBURGH	174	1	1	1	4.36	41.14	45.76	8.74	4.85	5.37	69.30	1.26	10.48	7061	12710	14
					2		43.02	47.84	9.14	5.07	5.11	72.46	1.32	6.90	7383	13289	
					3		47.35	52.65		5.58	5.62	79.76	1.45	7.59	8126	14626	
					4		46.10	53.90							8292	14925	
					5	4.96	43.80	51.24							7881	14185	
RICHLAND	UPPER FREEPORT	167 A	1	1	1	6.09	35.22	51.76	6.93	1.62					7077	12739	14
					2		37.50	55.12	7.38	1.72					7536	13565	
					3		40.49	59.51		1.86					8136	14646	
					4		39.77	60.23							8221	14798	
					5	6.65	37.12	56.23							7675	13815	
"	"	167 B	1	1	1	5.95	35.73	50.37	7.95	2.15					7034	12661	14
					2		37.99	53.56	8.45	2.28					7479	13462	
					3		41.50	58.50		2.49					8169	14705	
					4		40.62	59.38							8274	14894	
					5	6.59	37.94	55.47							7729	13913	
"	"	167 K	1	1	1	6.07	35.04	51.56	7.33	1.95	5.37	71.24	1.39	12.72	7062	12712	14
					2		37.30	54.90	7.80	2.08	5.00	75.84	1.48	7.80	7518	13532	
					3		40.46	59.54		2.26	5.42	82.25	1.61	8.46	8154	14677	
					4		39.64	60.36							8249	14849	
					5	6.67	37.00	56.33							7700	13860	
"	"	175 A	1	1	1	5.57	35.80	50.78	8.05	1.64					7102	12784	14
					2		37.83	53.66	8.51	1.73					7505	13509	
					3		41.35	58.65		1.89					8203	14766	
					4		40.57	59.43							8299	14938	
					5	5.94	38.16	55.90							7806	14050	
"	"	175 B	1	1	1	6.38	33.67	52.14	7.81	2.16					7015	12627	14
					2		35.96	55.70	8.34	2.31					7493	13487	
					3		39.23	60.77		2.52					8175	14714	
					4		38.31	61.69							8279	14903	
					5	7.06	35.61	57.33							7696	13852	
"	"	175 K	1	1	1	6.00	34.22	51.95	7.83	1.98	5.38	71.38	1.32	12.11	7067	12721	14
					2		36.40	55.27	8.33	2.11	5.01	75.93	1.40	7.22	7518	13532	
					3		39.71	60.29		2.30	5.47	82.82	1.53	7.88	8201	14762	
					4		38.83	61.17							8302	14944	
					5	6.53	36.27	57.10							7752	13954	
"	"	338	1	2	1	4.98	36.42	51.36	7.24	1.38	5.27	71.99	1.43	12.69	7094	12769	25
					2		38.33	54.05	7.62	1.45	4.97	75.76	1.50	8.70	7466	13438	
					3		41.49	58.51		1.57	5.38	82.01	1.62	9.42	8082	14546	
					4		40.83	59.17							8162	14692	
					5	5.45	38.60	55.95							7718	13892	
"	"	591	3	4	1	2.57	39.44	45.76	12.13	3.19					6816	12268	52
					2		40.52	47.02	12.46	3.28					7003	12605	
					3		46.29	53.71		3.75					7999	14399	
					4		45.09	54.91							8157	14682	
					5	3.14	43.68	53.18							7901	14221	
"	"	592	3	4	1	2.66	32.31	50.92	13.61	1.25					6679	12022	52
					2		33.71	52.31	13.98	1.28					6862	12351	
					3		39.19	60.81		1.49					7977	14358	
					4		38.10	61.90							8107	14593	
					5	3.14	36.90	59.96							7852	14134	
"	"	593	3	4	1	2.73	34.64	53.19	9.44	1.25					7056	12701	52
					2		35.51	54.58	9.71	1.29					7254	13057	
					3		39.44	60.56		1.43					8034	14461	
					4		38.54	61.36							8128	14631	
					5	3.06	37.47	59.47							7879	14182	
"	"	594	3	4	1	2.75	34.71	50.79	11.75	1.82					6917	12450	52
					2		35.69	52.23	12.08	1.87					7112	12802	
					3		40.59	59.41		2.13					8089	14561	
					4		39.54	60.46							8217	14790	
					5	3.19	38.28	58.53							7955	14319	
"	"	595	3	4	1	2.57	35.31	49.19	12.93	2.30					6786	12215	52
					2		36.24	50.49	13.27	2.36					6965	12537	
					3		41.78	58.22		2.72					8031	14455	
					4		40.58	59.42							8178	14720	
					5	3.03	39.35	57.62							7929	14273	
VALLEY	ANDERSON	169	1	1	1	4.33	40.21	45.07	10.39	3.75	5.37	68.30	1.50	10.69	6940	12492	14
					2		42.03	47.11	10.86	3.92	5.11	71.39	1.57	7.15	7254	13057	
					3		47.15	52.85		4.40	5.73	80.09	1.76	8.02	8138	14648	
					4		45.98	54.02							8297	14935	
					5	4.99	43.68	51.33							7883	14189	
"	UPPER FREEPORT	170 A	1	1	1	6.88	34.07	53.30	5.75	.84					7104	12787	14
					2		36.58	57.24	6.18	.90					7628	13732	
					3		38.99	61.01		.96					8130	14637	
					4		38.48	61.52							8191	14744	
					5	7.37	35.55	56.98							7587	13656	
"	"	170 B	1	1	1	6.25	36.16	52.29	5.30	.88					7224	13003	14
					2		38.57	55.78	5.65	.94					7705	13869	
					3		40.88	59.12		1.00					8166	14700	
					4		40.42	59.58							8223	14802	
					5	6.66	37.73	55.61							7676	13817	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B.t.u.	Year
		1	2	3	4												
GUERNSEY COUNTY (CON.)																	
VALLEY	UPPER FREEPORT	170 C[10]	1	2	1	578	3645	5138	639	177	531	7219	130	1304	7106	12790	25
					2		3859	5453	678	188	496	7662	138	838	7542	13575	
					3		4150	5850		202	532	8219	148	899	8091	14562	
					4		4081	5919							8172	14710	
					5	627	3825	5548							7659	13787	
"	"	170 K	1	1	1	649	3541	5257	553	88	549	7341	137	1332	7189	12940	14
					2		3787	5622	591	94	510	7850	147	808	7688	13838	
					3		4025	5975		100	542	8343	156	859	8171	14707	
					4		3976	6024							8229	14813	
					5	694	3700	5606							7659	13786	
"	"	335	1	2	1	507	3865	4831	797	284	520	7032	158	1209	6976	12556	25
					2		4071	5089	840	299	489	7408	167	797	7348	13226	
					3		4444	5556		326	534	8088	182	870	8022	14439	
					4		4350	5650							8137	14646	
					5	564	4106	5330							7677	13819	
"	"	336	1	2	1	532	3686	5145	637	139	532	7236	141	1315	7133	12840	25
					2		3893	5434	673	147	500	7643	149	888	7534	13561	
					3		4174	5826		158	536	8194	160	952	8078	14540	
					4		4113	5887							8152	14673	
					5	576	3876	5548							7682	13827	
HARRISON COUNTY																	
ATHENS	MEIGS CREEK	409	1	2	1	535	3309	5127	1029	220	521	6867	125	1238	6885	12393	7
					2		3496	5417	1087	232	488	7255	132	806	7274	13093	
					3		3922	6078		260	548	8140	148	904	8191	14690	
					4		3813	6187							8288	14919	
					5	610	3580	5810							7783	14009	
"	"	521 1[11]1	3	1	1	193	3913	4989	905	419					7074	12733	49
					2		3990	5087	923	427					7213	12983	
					3		4396	5604		470					7946	14303	
					4		4271	5729							8091	14563	
					5	220	4177	5603							7913	14244	
"	"	521 2[11]1	3	1	1	173	3698	4753	1376	310					6810	12259	49
					2		3763	4836	1401	315					6930	12475	
					3		4376	5624		366					8059	14508	
					4		4240	5760							8231	14816	
					5	207	4152	5641							8059	14507	
"	"	521 3[11]1	3	1	1	193	3470	4921	1416	405					6737	12126	49
					2		3538	5018	1444	413					6869	12365	
					3		4135	5865		483					8028	14452	
					4		3966	6034							8224	14803	
					5	234	3873	5893							8031	14456	
"	"	521 4[11]1	3	1	1	186	3734	5214	866	242					7203	12966	49
					2		3805	5313	882	247					7340	13212	
					3		4173	5827		271					8050	14490	
					4		4080	5920							8159	14687	
					5	208	3995	5797							7989	14381	
"	"	521 5[11]1	3	1	1	172	3938	5087	803	242					7306	13151	49
					2		4007	5176	817	246					7434	13381	
					3		4363	5637		268					8095	14571	
					4		4279	5721							8200	14760	
					5	191	4197	5612							8043	14478	
"	"	521 9[11]1	3	1	1	187	3718	5000	1095	341					6993	12588	49
					2		3789	5095	1116	347					7126	12828	
					3		4265	5735		391					8021	14439	
					4		4139	5861							8171	14708	
					5	217	4048	5735							7994	14389	
"	"	523 1[11]1	3	1	1	190	3813	4986	1011	367					7031	12656	49
					2		3887	5083	1030	374					7167	12901	
					3		4333	5667		417					7990	14382	
					4		4210	5790							8136	14644	
					5	218	4118	5664							7959	14326	
"	"	523 2[11]1	3	1	1	202	3358	5014	1426	179					6674	12014	49
					2		3427	5118	1455	183					6812	12261	
					3		4011	5989		214					7972	14349	
					4		3887	6113							8118	14613	
					5	242	3794	5964							7923	14261	
"	"	523 3[11]1	3	1	1	216	3476	5478	830	145					7163	12894	49
					2		3553	5599	848	148					7321	13178	
					3		3882	6118		162					7999	14399	
					4		3805	6195							8087	14556	
					5	239	3715	6046							7893	14208	
"	"	523 4[11]1	3	1	1	190	3171	4752	1887	111					6294	11329	49
					2		3232	4845	1923	113					6416	11548	
					3		4001	5999		140					7944	14297	
					4		3858	6142							8121	14618	
					5	240	3767	5993							7927	14268	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B t u	Year
		1	2	3	4												
								HARRISON COUNTY (CON.)									
ATHENS	MEIGS CREEK	523 $5^{11}1$	3	1		206	3582	5517	695	135					7277	13099	49
				2			3657	5633	710	138					7430	13374	
				3			3936	6054		149					7998	14396	
				4			3871	6129							8072	14529	
				5		225	3784	5991							7891	14203	
"	"	523 $6^{11}1$	3	1		220	3488	5131	1161	256					6803	12246	49
				2			3566	5247	1187	262					6957	12522	
				3			4046	5954		297					7894	14209	
				4			3926	6074							8029	14452	
				5		256	3826	5918							7823	14082	
"	"	523 $9^{11}1$	3	1		203	3528	5143	1126	221					6910	12438	49
				2			3601	5250	1149	226					7053	12696	
				3			4068	5932		255					7969	14344	
				4			3959	6041							8096	14572	
				5		234	3867	5899							7906	14231	
"	PITTSBURGH	252	1	2	1	598	3435	5370	597	135	544	7222	131	1371	7202	12964	7
					2		3653	5712	635	144	508	7681	139	893	7660	13788	
					3		3901	6099		154	542	8202	148	954	8179	14723	
					4		3838	6162							8251	14852	
					5	644	3592	5764							7720	13896	
CADIZ	"	251	1	2	1	383	3670	4859	1088	438	509	6770	127	1068	6864	12355	7
					2		3816	5053	1131	455	485	7040	132	757	7137	12847	
					3		4303	5697		513	547	7937	149	854	8047	14485	
					4		4155	5845							8221	14797	
					5	446	3970	5584							7854	14138	
FREEPORT	UPPER FREEPORT	333 A	1	2	1	617	3818	4772	793	362	528	6951	141	1225	7002	12604	25
					2		4069	5086	845	386	489	7408	150	722	7462	13432	
					3		4445	5555		422	534	8091	164	789	8151	14672	
					4		4335	5665							8287	14917	
					5	690	4036	5274							7716	13889	
"	"	333 B	1	4	1	61	359	501	79	29	54	703	14	121	6983	12570	24
					2		382	534	84	31	50	749	15	71	7439	13390	
					3		417	583		34	55	818	16	77	8122	14620	
					4		407	593							8241	14834	
					5	68	379	553							7681	13825	
"	"	529 12	3	1	1	33	340	537	90	31	50	717	13	99	7061	12710	23
					2		352	555	93	32	48	741	14	72	7300	13140	
					3		388	612		36	53	817	15	79	8050	14490	
					4		376	624							8176	14717	
					5	37	368	601							7874	14174	
"	"	530	1	1	1	67	348	508	77	23	53	704	14	129	6972	12550	24
					2		373	545	82	25	49	754	15	75	7472	13450	
					3		405	594		27	54	821	16	82	8139	14650	
					4		397	603							8247	14844	
					5	74	368	558							7641	13753	
"	"	532	3	4	1	295	3709	5305	691	289					7538	13569	23
					2		3822	5466	712	298					7767	13981	
					3		4115	5885		321					8362	15053	
					4		4021	5979							8475	15255	
					5	324	3891	5785							8201	14761	
"	"	533	3	4	1	254	3772	5294	680	361					7439	13390	23
					2		3870	5432	698	370					7633	13739	
					3		4160	5840		398					8206	14770	
					4		4054	5946							8327	14989	
					5	280	3941	5779							8094	14569	
"	"	534	3	4	1	249	3825	5183	743	362					7325	13185	23
					2		3923	5315	762	371					7512	13522	
					3		4247	5753		402					8132	14637	
					4		4139	5861							8257	14863	
					5	277	4023	5700							8028	14451	
"	"	535	3	4	1	216	3926	5120	738	283					7706	13871	14
					2		4013	5233	754	289					7876	14177	
					3		4340	5660		313					8518	15333	
					4		4251	5749							8636	15545	
					5	239	4149	5612							8431	15175	
GERMAN	PITTSBURGH	118	1	1	1	36	395	492	77	38	54	717	14	100	7206	12970	38
					2		409	511	80	39	52	744	14	71	7472	13450	
					3		445	555		42	57	809	16	76	8117	14610	
					4		435	565							8256	14860	
					5	40	417	543							7922	14260	
MONROE	UPPER FREEPORT	332	1	2	1	684	3601	4688	1027	263	516	6722	142	1330	6650	11970	25
					2		3865	5032	1103	282	472	7216	152	775	7138	12848	
					3		4344	5656		317	531	8110	171	871	8023	14441	
					4		4234	5766							8158	14684	
					5	782	3903	5315							7520	13536	
SHORT CREEK	PITTSBURGH	249 7	1	2	1	654	3548	5124	674	219	570	7049	122	1366	7061	12710	7
					2		3796	5483	721	234	532	7542	131	840	7555	13599	
					3		4091	5909		252	573	8129	141	905	8142	14656	
					4		4008	5992							8237	14827	
					5	715	3722	5563							7649	13769	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
HARRISON COUNTY (CON.)																	
SHORT CREEK	PITTSBURGH	250	1	2	1	4.18	36.95	50.65	8.22	2.83	5.36	71.20	1.26	11.13	7160	12888	7
					2		38.56	52.86	8.58	2.95	5.11	74.31	1.31	7.74	7472	13450	
					3		42.18	57.82		3.23	5.59	81.28	1.43	8.47	8173	14712	
					4		41.18	58.82							8293	14928	
					5	4.57	39.25	56.08							7906	14231	
HOCKING COUNTY																	
GREEN	MIDDLE KITTANNING	482	1	2	1	6.55	37.30	49.18	6.97	2.57	5.45	68.40	1.18	15.43	6901	12422	2
					2		39.91	52.63	7.46	2.75	5.05	73.19	1.26	10.29	7385	13293	
					3		43.13	56.87		2.97	5.46	79.09	1.36	11.12	7980	14365	
					4		42.26	57.74							8082	14548	
					5	7.19	39.22	53.59							7501	13501	
STARR	"	481	1	2	1	6.52	38.30	47.15	8.03	3.52	5.49	67.33	1.20	14.43	6850	12330	2
					2		40.97	50.44	8.59	3.77	5.10	72.03	1.28	9.23	7328	13190	
					3		44.82	55.18		4.12	5.58	78.80	1.40	10.10	8017	14429	
					4		43.74	56.26							8148	14666	
					5	7.29	40.56	52.15							7553	13596	
WARD	"	478	1	2	1	7.40	34.17	53.43	5.00	1.06	5.55	70.58	1.32	16.49	7027	12649	2
					2		36.90	57.70	5.40	1.14	5.11	76.22	1.43	10.70	7589	13660	
					3		39.01	60.99		1.21	5.40	80.57	1.51	11.31	8022	14440	
					4		38.50	61.50							8079	14542	
					5	7.87	35.47	56.66							7443	13398	
"	"	479	1	2	1	7.45	35.01	52.73	4.81	.66	5.53	71.04	1.43	16.53	7057	12703	2
					2		37.83	56.97	5.20	.71	5.08	76.76	1.54	10.71	7625	13725	
					3		39.91	60.09		.75	5.36	80.97	1.62	11.30	8043	14478	
					4		39.50	60.50							8091	14564	
					5	7.89	36.38	55.73							7453	13416	
"	"	480	1	2	1	7.55	34.03	52.57	5.85	.77	5.52	70.05	1.42	16.39	6950	12510	2
					2		36.81	56.86	6.33	.83	5.06	75.77	1.54	10.47	7518	13532	
					3		39.30	60.70		.89	5.40	80.89	1.64	11.18	8026	14446	
					4		38.80	61.20							8084	14552	
					5	8.10	35.65	56.25							7429	13373	
"	"	527	1	1	1	1.02	35.4	49.1	5.3	.6	5.7	68.6	1.4	18.4	6717	12090	48
					2		39.4	54.7	5.9	.6	5.1	76.3	1.6	10.5	7478	13460	
					3		41.9	58.1		.7	5.4	81.2	1.7	11.0	7947	14310	
					4		41.5	58.5							7997	14395	
					5	1.09	36.9	52.2							7132	12837	
"	"	527	2	1	1	.92	33.3	46.9	10.6	.5	5.5	65.2	1.3	16.9	6367	11460	48
					2		36.6	51.7	11.7	.5	4.9	71.8	1.4	9.7	7011	12620	
					3		41.6	58.5		.6	5.5	81.3	1.6	11.0	7940	14290	
					4		40.7	59.3							8034	14462	
					5	1.04	36.6	53.0							7197	12954	
"	"	527	3	1	1	1.04	35.5	46.5	7.6	1.4	5.5	64.5	1.4	19.6	6283	11310	48
					2		39.6	51.9	8.5	1.5	4.9	71.9	1.6	11.6	7011	12620	
					3		43.3	56.7		1.7	5.3	78.6	1.7	12.7	7662	13790	
					4		42.6	57.4							7744	13940	
					5	1.14	37.7	50.9							6861	12349	
"	"	568	1	1	1	9.72	32.44	53.41	4.43	.54	5.70	69.50	1.25	18.58	6804	12247	7
					2		35.93	59.16	4.91	.60	5.12	76.99	1.38	11.00	7537	13567	
					3		37.79	62.21		.63	5.38	80.97	1.45	11.57	7926	14268	
					4		37.40	62.60							7970	14345	
					5	10.24	33.58	56.18							7152	12874	
HOLMES COUNTY																	
CLARK	"	477	1	2	1	5.84	40.29	48.60	5.27	2.65					7093	12767	28
					2		42.79	51.61	5.50	2.82					7533	13559	
					3		45.33	54.67		2.99					7980	14363	
					4		44.60	55.40							8067	14521	
					5	6.29	41.80	51.91							7559	13607	
KILLBUCK	LOWER KITTANNING	312	1	2	1	7.58	40.77	43.58	8.07	3.94	5.58	65.88	1.33	15.20	6693	12048	28
					2		44.11	47.16	8.73	4.26	5.13	71.28	1.44	9.16	7242	13036	
					3		48.33	51.67		4.67	5.62	78.09	1.58	10.04	7935	14283	
					4		47.27	52.73							8074	14534	
					5	8.51	43.25	48.24							7388	13298	
MONROE	QUAKERTOWN	229	1	2	1	6.43	40.69	46.84	6.04	2.48					7024	12643	28
					2		43.48	50.06	6.46	2.65					7506	13511	
					3		46.48	53.52		2.83					8024	14444	
					4		45.76	54.24							8117	14611	
					5	6.98	42.57	50.45							7551	13591	
PRAIRIE	BEDFORD	380	1	2	1	8.02	40.97	44.93	6.08	2.53	5.00	67.58	1.41	17.40	6837	12306	28
					2		44.54	48.85	6.61	2.75	4.47	73.47	1.53	11.17	7433	13379	
					3		47.69	52.31		2.94	4.79	78.67	1.64	11.96	7959	14326	
					4		46.98	53.02							8053	14496	
					5	8.71	42.89	48.40							7352	13233	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
HOLMES COUNTY (CON.)																	
WALNUT CREEK	MIDDLE KITTANNING	476	1	2	1	7.31	34.92	53.56	4.21	1.00	5.42	70.62	1.44	17.31	6952	12514	2
					2		37.68	57.78	4.54	1.08	4.97	76.19	1.56	11.66	7500	13500	
					3		39.47	60.53		1.13	5.21	79.82	1.63	12.21	7857	14142	
					4		39.03	60.97							7904	14228	
					5	7.70	36.02	56.28							7296	13133	
"	LOWER KITTANNING	311	1	2	1	6.34	43.21	44.06	6.39	3.65					6973	12551	28
					2		46.13	47.05	6.82	3.90					7444	13400	
					3		49.51	50.49		4.19					7989	14381	
					4		48.65	51.35							8107	14593	
					5	6.96	45.27	47.77							7543	13578	
JACKSON COUNTY																	
BLOOMFIELD	CLARION	371	1	2	1	5.31	37.33	43.82	13.54	6.08	4.98	62.05	1.23	12.12	6394	11509	99
					2		39.42	46.28	14.30	6.42	4.64	65.53	1.30	7.81	6753	12154	
					3		46.00	54.00		7.49	5.41	76.47	1.52	9.11	7880	14182	
					4		44.07	55.93							8113	14604	
					5	6.47	41.22	52.31							7588	13659	
COAL	QUAKERTOWN	228	1	2	1	11.28	36.41	50.64	1.67	.64	5.58	70.52	1.39	20.20	6761	12171	25
					2		41.04	57.08	1.88	.72	4.88	79.49	1.57	11.46	7621	13719	
					3		41.83	58.17		.73	4.97	81.02	1.60	11.68	7767	13982	
					4		41.61	58.39							7791	14023	
					5	11.53	36.81	51.66							6892	12406	
JEFFERSON	BROOKVILLE	379	1	2	1	10.64	38.26	44.43	6.57	1.17	5.94	65.67	1.53	19.02	6477	11659	28
					2		42.81	49.73	7.46	1.31	5.33	73.49	1.71	10.70	7248	13047	
					3		46.26	53.74		1.42	5.76	79.41	1.85	11.56	7832	14099	
					4		45.70	54.30							7906	14231	
					5	11.55	40.43	48.02							6993	12588	
"	UPPER MERCER	284	1	2	1	9.51	38.98	46.81	4.70	1.06					6752	12154	28
					2		43.07	51.74	5.19	1.17					7462	13431	
					3		45.43	54.57		1.23					7870	14166	
					4		45.00	55.00							7924	14264	
					5	10.08	40.47	49.45							7126	12827	
LIBERTY	SHARON	178 A	1	1	1	13.50	31.75	50.42	4.23	.86					6491	11684	7
					2		36.75	58.35	4.90	.99					7513	13523	
					3		38.64	61.36		1.04					7900	14220	
					4		38.19	61.81							7949	14309	
					5	14.32	32.72	52.96							6811	12259	
"	"	178 B	1	1	1	12.77	31.61	47.94	7.78	.97					6259	11266	7
					2		36.12	54.96	8.92	1.11					7175	12915	
					3		39.66	60.34		1.22					7878	14180	
					4		38.95	61.05							7959	14327	
					5	14.02	33.50	52.48							6843	12318	
LICK	"	221	1	2	1	11.68	33.03	48.74	6.55	.47	5.27	66.25	1.30	20.06	6337	11407	25
					2		37.36	55.12	7.52	.53	4.50	74.93	1.47	11.05	7167	12901	
					3		40.40	59.60		.57	4.87	81.02	1.59	11.95	7750	13950	
					4		39.90	60.10							7809	14057	
					5	12.61	34.91	52.58							6833	12299	
"	"	222	1	2	1	10.75	35.38	48.88	4.99	.47	5.33	67.97	1.42	19.82	6496	11692	25
					2		39.64	54.77	5.59	.53	4.64	76.16	1.59	11.49	7278	13100	
					3		41.99	58.01		.56	4.91	80.68	1.68	12.17	7709	13876	
					4		41.61	58.39							7754	13957	
					5	11.39	36.88	51.73							6871	12367	
MADISON	CLARION	370	1	2	1	4.90	35.75	45.55	13.70	6.14	4.89	62.57	1.23	11.47	6460	11628	99
					2		37.59	48.00	14.41	6.46	4.57	65.79	1.29	7.48	6793	12227	
					3		43.92	56.08		7.55	5.34	76.86	1.51	8.74	7937	14286	
					4		41.85	58.15							8176	14717	
					5	5.99	39.35	54.66							7686	13835	
MILTON	LOWER KITTANNING	310	1	2	1	8.39	35.18	49.01	7.42	2.55	5.47	66.63	1.37	16.46	6772	12189	7
					2		38.40	53.50	8.10	2.89	4.96	72.73	1.50	9.82	7392	13306	
					3		41.78	58.22		3.14	5.40	79.14	1.63	10.69	8044	14479	
					4		40.82	59.18							8155	14679	
					5	9.27	37.03	53.70							7399	13318	
"	"	561 D	1	1	1	9.38	36.74	46.86	7.52	4.08					6610	11898	5
					2		40.54	51.05	8.41	4.50					7294	13129	
					3		44.26	55.74		4.91					7964	14335	
					4		43.04	56.96							8106	14590	
					5	10.48	38.53	50.99							7257	13062	
"	"	561 E	1	1	1	8.95	37.82	43.89	9.34	4.41							5
					2		41.54	48.20	10.26	4.84							
					3		46.29	53.71		5.39							
					4		44.96	55.04									
					5	10.23	40.36	49.41									
"	CLARION	366	1	2	1	4.71	40.51	46.17	8.51	3.73	5.44	67.51	1.26	13.45	6911	12440	99
					2		42.51	48.45	9.04	3.91	5.16	70.85	1.32	9.72	7253	13055	
					3		46.73	53.27		4.30	5.67	77.89	1.45	10.69	7974	14352	
					4		45.66	54.34							8111	14599	
					5	5.31	43.24	51.45							7679	13822	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
JACKSON COUNTY (CON.)																	
MILTON	CLARION	367	1	2	1	533	4101	4526	840	372	550	6652	128	1458	6825	12285	99
					2		4332	4781	887	393	519	7026	135	1040	7209	12976	
					3		4754	5246		431	570	7710	148	1141	7911	14239	
					4		4650	5350							8044	14480	
					5	600	4371	5029							7562	13612	
"	"	369	1	2	1	561	3892	4738	809	370	547	6730	128	1416	6863	12353	99
					2		4123	5020	857	392	514	7129	136	972	7271	13087	
					3		4509	5491		429	562	7797	149	1063	7953	14314	
					4		4400	5600							8084	14552	
					5	629	4123	5248							7576	13637	
"	"	561 A	1	1	1	750	3925	4274	1051	544							5
					2		4243	4621	1136	588							
					3		4787	5213		663							
					4		4636	5364									
					5	876	4230	4894									
"	"	561 B	1	1	1	845	4127	4355	673	310					6805	12249	5
					2		4508	4757	735	339					7433	13379	
					3		4866	5134		366					8023	14440	
					4		4782	5218							8136	14645	
					5	928	4339	4733							7381	13286	
"	"	561 C	1	2	1	498	3971	4551	980	408	539	6614	128	1331	6801	12242	99
					2		4179	4790	1031	429	509	6961	135	935	7157	12883	
					3		4659	5341		478	558	7761	151	1042	7980	14364	
					4		4537	5463							8136	14645	
					5	571	4278	5151							767	1380	
"	"	607 A	1	3	1	365	4347	4501	787	492					6911	12440	54
					2		4512	4671	817	511					7173	12911	
					3		4913	5087		556					7811	14060	
					4		4801	5199							7957	14322	
					5	411	4603	4986							7629	13733	
"	"	607 B[13]	1	3	1	364	4210	4353	1073	486					6691	12045	54
					2		4369	4517	1114	504					6944	12500	
					3		4917	5083		567					7815	14067	
					4		4787	5213							7987	14376	
					5	425	4583	4992							7647	13765	
"	"	608	1	3	1	336	4075	4547	1042	307					6800	12240	54
					2		4217	4705	1078	318					7036	12666	
					3		4727	5273		356					7886	14196	
					4		4623	5377							8023	14441	
					5	386	4444	5170							7713	13883	
"	WINTERS	203	1	2	1	931	3678	4778	613	200	570	6780	127	1710	6976	12557	14
					2		4056	5268	676	221	514	7476	140	973	7692	13846	
					3		4350	5650		237	551	8018	150	1044	8250	14850	
					4		4278	5722							8341	15014	
					5	1009	3846	5145							7499	13499	
"	BROOKVILLE	378	1	2	1	363	4005	3836	1796	95	536	6386	121	1066	6407	11533	28
					2		4166	3980	1864	99	515	6626	125	771	6648	11967	
					3		5108	4892		122	633	8143	154	948	8171	14709	
					4		5001	4999							8347	15024	
					5	453	4775	4772							7968	14342	
"	QUAKERTOWN	226	1	2	1	929	3296	5426	349	125					6960	12528	14
					2		3633	5982	385	138					7673	13811	
					3		3778	6222		144					7980	14364	
					4		3730	6270							8029	14453	
					5	972	3369	5659							7248	13047	
"	"	227	1	2	1	974	3550	4924	552	128	536	6754	143	1887	6553	11796	25
					2		3933	5455	612	142	474	7483	158	1131	7260	13069	
					3		4189	5811		151	505	7971	168	1205	7733	13921	
					4		4133	5867							7797	14035	
					5	1044	3701	5255							6983	12570	
JEFFERSON COUNTY																	
CROSS CREEK	PITTSBURGH	190	1	1	1	519	3469	5067	945	238							4
					2		3659	5344	997	251							
					3		4064	5936		279							
					4		3960	6040									
					5	587	3727	5686									
ISLAND CREEK	MAHONING	189	1	1	1	389	3646	5225	740	353							4
					2		3794	5436	770	378							
					3		4111	5889		410							
					4		3997	6003									
					5	432	3824	5744									
"	LOWER FREEPORT	349	1	2	1	310	3806	4891	993	360	514	7053	110	970	7222	12999	26
					2		3928	5047	1025	371	496	7279	114	715	7453	13415	
					3		4377	5623		413	563	8110	127	797	8304	14947	
					4		4256	5744							8459	15226	
					5	355	4104	5541							8158	14685	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
JEFFERSON COUNTY (CON.)																	
KNOX	PITTSBURGH	121	1	1	1	337	3786	4878	999	394					7178	12920	16
					2		3917	5049	1034	408					7429	13372	
					3		4359	5631		455					8286	14914	
					4		4240	5760							8449	15208	
					5	387	4077	5536							8121	14617	
"	"	186	1	1	1	318	3811	4935	936	402					7187	12937	16
					2		3936	5097	967	415					7423	13361	
					3		4357	5643		459					8218	14791	
					4		4231	5769							8373	15072	
					5	363	4077	5560							8070	14526	
"	LOWER KITTANNING	309	1	2	1	246	3848	5166	740	382	538	7420	127	793	7591	13664	7
					2		3945	5296	759	392	524	7607	130	588	7782	14008	
					3		4269	5731		424	567	8232	141	636	8421	15159	
					4		4158	5842							8559	15407	
					5	274	4044	5682							8325	14985	
MOUNT PLEASANT	PITTSBURGH	248	1	2	1	310	3792	4946	952	383	522	6956	110	1077	7153	12875	7
					2		3913	5104	983	395	504	7178	113	827	7382	13287	
					3		4340	5660		438	559	7961	125	917	8187	14735	
					4		4215	5785							8338	15009	
					5	354	4056	5580							8043	14477	
"	"	604 A^{14}	1	3	1	188	3722	4685	1405	317					6835	12304	54
					2		3793	4775	1432	323					6966	12540	
					3		4427	5573		377					8130	14636	
					4		4289	5711							8309	14957	
					5	226	4192	5582							8122	14619	
"	"	604 B^{15}	1	3	1	456	3667	4781	1096	283					6831	12296	54
					2		3842	5010	1148	297					7157	12883	
					3		4340	5660		336					8085	14554	
					4		4224	5776							8229	14813	
					5	527	4002	5471							7797	14034	
SALINE	UPPER FREEPORT	138 A	1	1	1	475	3828	5191	506	176					7480	13464	16
					2		4019	5450	531	185					7853	14135	
					3		4244	5756		195					8293	14135	
					4		4185	5815							8366	15059	
					5	508	3972	5520							7942	14296	
"	"	138 B	1	1	1	343	3626	4957	1074	505	515	6966	137	803	7068	12722	16
					2		3755	5133	1112	523	494	7213	142	516	7319	13174	
					3		4225	5775		588	556	8115	160	581	8235	14822	
					4		4061	5939							8428	15171	
					5	401	3898	5701							8091	14563	
"	"	139	1	1	1	373	3664	5124	849	287					7290	13122	16
					2		3795	5323	882	298					7572	13630	
					3		4162	5858		327					8304	14948	
					4		4058	5942							8431	15175	
					5	418	3889	5693							8078	14541	
"	LOWER FREEPORT	131	1	1	1	426	3555	4810	1209	236					6941	12494	16
					2		3713	5024	1263	246					7250	13050	
					3		4250	5750		282					8298	14936	
					4		4133	5867							8448	15207	
					5	497	3928	5575							8028	14450	
"	MIDDLE KITTANNING	122	1	1	1	264	3675	4946	1115	207	526	7104	149	899	7158	12884	16
					2		3775	5080	1145	213	510	7297	153	682	7352	13234	
					3		4263	5737		241	576	8240	173	770	8303	14945	
					4		4152	5838							8435	15183	
					5	304	4035	5661							8178	14721	
"	LOWER KITTANNING	144	1	1	1	344	3717	4671	1268	730					6907	12433	16
					2		3849	4838	1313	756					7154	12877	
					3		4431	5569		870					8235	14823	
					4		4214	5786							8503	15306	
					5	418	4039	5543							8147	14665	
"	"	145	1	1	1	221	3963	4750	1066	496	528	7104	134	672	7236	13025	16
					2		4053	4857	1090	507	514	7265	137	487	7400	13320	
					3		4549	5451		569	577	8153	154	547	8305	14949	
					4		4404	5596							8496	15293	
					5	268	4290	5452							8277	14899	
SMITHFIELD	PITTSBURGH	162	1	1	1	545	3573	5422	460	84					7401	13322	13
					2		3779	5735	486	89					7827	14089	
					3		3972	6028		94					8227	14809	
					4		3930	6070							8277	14899	
					5	576	3704	5720							7802	14043	
"	"	163	1	2	1	496	3451	5408	645	175	537	7243	133	1267	7277	13099	7
					2		3631	5690	679	184	507	7621	140	869	7656	13781	
					3		3896	6104		197	544	8177	150	932	8214	14785	
					4		3822	6178							8297	14935	
					5	539	3616	5845							7851	14132	
"	"	192	1	1	1	487	3663	5125	725	260	536	7191	138	1150	7218	12992	13
					2		3851	5387	762	273	507	7559	145	754	7588	13658	
					3		4169	5831		295	549	8182	157	816	8214	14785	
					4		4078	5922							8322	14979	
					5	537	3858	5605							7875	14175	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
								JEFFERSON COUNTY (CON.)									
SMITHFIELD	PITTSBURGH	193	1	1	1	5.47	35.77	53.88	5.48	.77					7324	13183	13
					2		37.84	56.36	5.80	.81					7748	13946	
					3		40.17	59.83		.86					8225	14805	
					4		39.72	60.28							8281	14906	
					5	5.84	37.40	56.76							7797	14035	
"	"	246	1	2	1	4.30	35.28	52.54	7.88	3.01	5.18	71.34	1.20	11.39	7144	12859	7
					2		36.87	54.90	8.23	3.15	4.91	74.55	1.25	7.91	7465	13437	
					3		40.18	59.82		3.43	5.35	81.24	1.36	8.62	8134	14642	
					4		39.10	60.90							8254	14858	
					5	4.79	37.23	57.98							7859	14147	
"	"	573	A	1	1	4.06	38.49	49.70	7.75	3.67					7304	13147	5
					2		40.12	51.80	8.08	3.82					7613	13703	
					3		43.65	56.35		4.16					8282	14908	
					4		42.55	57.45							8418	15153	
					5	4.53	40.62	54.85							8037	14466	
"	"	573	B	1	1	4.20	37.16	51.13	7.51	3.22							5
					2		38.79	53.37	7.84	3.36							
					3		42.09	57.91		3.65							
					4		41.05	58.95									
					5	4.56	39.14	56.20									
SPRINGFIELD	LOWER FREEPORT	195	A	1	1	3.40	38.01	52.37	6.22	2.20					7518	13532	12
					2		39.35	54.21	6.44	2.28					7783	14009	
					3		42.06	57.94		2.44					8319	14973	
					4		41.31	58.69							8410	15138	
					5	3.69	39.79	56.52							8099	14578	
"	"	195	B	1	1	3.50	37.93	50.63	7.94	3.14					7364	13255	12
					2		39.31	52.46	8.23	3.25					7631	13736	
					3		42.84	57.16		3.64					8315	14968	
					4		41.82	58.18							8442	15196	
					5	3.90	40.18	55.92							8112	14602	
"	"	195	C	1	1	3.59	37.03	50.64	8.74	3.70	5.19	71.30	1.39	9.68	7224	13003	12
					2		38.41	52.52	9.07	3.84	4.97	73.95	1.44	6.73	7493	13487	
					3		42.24	57.76		4.22	5.47	81.33	1.58	7.40	8240	14832	
					4		41.03	58.97							8384	15092	
					5	4.06	39.36	56.58							8044	14479	
"	"	196	A	1	1	3.47	38.61	49.66	8.26	2.40					7346	13223	12
					2		40.00	51.44	8.56	2.49					7610	13698	
					3		43.74	56.26		2.72					8322	14980	
					4		42.87	57.13							8436	15185	
					5	3.87	41.21	54.92							8110	14598	
"	"	196	B	1	1	3.58	37.68	49.17	9.67	3.08					7156	12881	12
					2		38.97	51.00	10.03	3.19					7421	13358	
					3		43.31	56.69		3.55					8248	14847	
					4		42.20	57.80							8388	15099	
					5	4.07	40.49	55.44							8047	14485	
"	"	196	C	1	1	4.04	38.61	48.93	8.42	2.95					7234	13021	12
					2		40.24	50.99	8.77	3.07					7539	13570	
					3		44.11	55.89		3.37					8264	14874	
					4		43.12	56.88							8390	15102	
					5	4.52	41.17	54.31							8011	14419	
"	"	347	1	2	1	3.83	41.00	47.68	7.49	2.86	5.50	71.76	1.17	11.22	7269	13084	26
					2		42.64	49.57	7.79	2.98	5.28	74.62	1.22	8.11	7558	13604	
					3		46.24	53.76		3.23	5.73	80.92	1.32	8.80	8197	14753	
					4		45.39	54.61							8311	14959	
					5	4.24	43.46	52.30							7958	14325	
"	"	571	A	1	1	3.26	37.43	51.23	7.68	3.07					7342	13216	12
					2		38.85	53.18	7.97	3.19					7621	13718	
					3		42.21	57.79		3.47					8281	14906	
					4		41.21	58.79							8403	15126	
					5	4.07	39.53	56.40							8062	14511	
"	"	571	B	1	1	3.52	38.31	50.78	7.39	2.99					7363	13253	12
					2		39.71	52.63	7.66	3.10					7632	13738	
					3		43.00	57.00		3.36					8265	14878	
					4		42.05	57.95							8383	15089	
					5	3.89	40.42	55.69							8055	14499	
"	"	571	C	1	1	3.27	38.87	50.37	7.49	3.23					7359	13246	12
					2		40.18	52.08	7.74	3.34					7608	13694	
					3		43.55	56.45		3.62					8246	14843	
					4		42.56	57.44							8368	15063	
					5	3.63	41.02	55.35							8065	14517	
"	"	571	D	1	1	3.36	37.56	52.06	7.02	2.40							10
					2		38.87	53.87	7.26	2.48							
					3		41.91	58.09		2.67							
					4		41.08	58.92									
					5	3.69	39.56	56.75									
"	MIDDLE KITTANNING	117	A	1	1	3.6	37.7	50.8	8.0	3.0					7367	13260	30
					2		39.1	52.6	8.3	3.1					7634	13741	
					3		42.6	57.4		3.4					8325	14985	
					4		41.7	58.3							8450	15210	
					5	3.9	40.0	56.1							8117	14610	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
								JEFFERSON COUNTY (CON.)									
SPRINGFIELD	MIDDLE KITTANNING	117 B	1	1	1	32	382	502	84	36					7300	13140	30
					2		395	518	87	37					7541	13574	
					3		433	567		41					8259	14867	
					4		420	580							8394	15110	
					5	36	406	558							8094	14570	
"	"	117 C	1	1	1	34	376	509	82	35					7367	13260	30
					2		388	527	85	36					7626	13727	
					3		424	576		39					8334	15002	
					4		413	587							8472	15250	
					5	38	397	565							8150	14670	
"	"	117 D	1	1	1	39	376	504	82	21					7333	13200	30
					2		390	525	85	23					7631	13736	
					3		426	574		24					8340	15012	
					4		418	582							8450	15210	
					5	43	400	557							8083	14550	
"	"	117 E	1	1	1	36	381	500	83	25					7350	13230	30
					2		395	519	86	26					7624	13724	
					3		432	568		28					8342	15015	
					4		424	576							8461	15220	
					5	40	407	553							8122	14620	
"	"	117 F	1	1	1	37	376	518	69	33					7428	13370	30
					2		390	538	72	34					7713	13883	
					3		420	580		37					8311	14960	
					4		411	589							8428	15170	
					5	41	394	565							8083	14550	
"	"	117 K	1	1	1	36	377	507	80	29	56	717	14	104	7350	13230	30
					2		391	526	83	30	54	743	15	75	7624	13724	
					3		426	574		33	59	810	16	82	8314	14966	
					4		416	584							8439	15190	
					5	40	400	560							8100	14580	
STEUBENVILLE	PITTSBURGH	179		1	1	655	3448	5036	851	252							4
					2		3690	5389	921	270							
					3		4064	5936		297							
					4		3961	6039									
					5	733	3671	5596									
"	LOWER FREEPORT	187 A	1	1	1	380	3539	5339	742	191					7344	13219	13
					2		3679	5550	771	199					7634	13741	
					3		3986	6014		216					8272	14889	
					4		3906	6094							8367	15060	
					5	418	3742	5840							8018	14432	
"	"	187 B	1	1	1	382	3590	5343	685	190	524	7420	145	1036	7418	13352	13
					2		3733	5555	712	198	501	7715	151	723	7712	13882	
					3		4019	5981		213	539	8307	163	778	8303	14946	
					4		3943	6057							8394	15109	
					5	417	3778	5805							8044	14480	
WARREN	PITTSBURGH	159 A	1	1	1	469	3557	5373	601	154					7403	13325	5
					2		3732	5637	631	162					7767	13981	
					3		3983	6017		173					8290	14923	
					4		3919	6081							8367	15061	
					5	506	3720	5774							7943	14297	
"	"	159 B	1	1	1	499	3533	5398	570	95							5
					2		3718	5682	600	100							
					3		3955	6045		106							
					4		3904	6096									
					5	535	3696	5769									
"	"	244		1	2	1	313	3788	5077	822	402	538	7103	126	1009	7233	13019	7
						2		3910	5241	849	415	519	7332	130	755	7466	13439
						3		4273	5727		454	567	8012	142	825	8159	14686
						4		4151	5849							8302	14943
						5	362	4006	5642							8009	14417
"	"	245		1	2	1	457	3240	5403	900	155	506	7118	132	1189	7105	12789	7
						2		3395	5662	943	162	477	7459	138	821	7445	13401
						3		3748	6252		179	527	8236	152	906	8220	14796
						4		3660	6340							8322	14979
						5	511	3473	6016							7897	14214
WAYNE	"	191 A	1	1	1	501	3615	5283	601	174					7327	13189	12
					2		3806	5561	653	183					7713	13883	
					3		4063	5937		195					8234	14821	
					4		3996	6004							8314	14965	
					5	541	3779	5680							7864	14156	
"	"	191 B	1	1	1	432	3709	4914	945	383					7072	12730	12
					2		3876	5136	988	399					7391	13304	
					3		4301	5699		443					8201	14763	
					4		4174	5826							8355	15039	
					5	493	3969	5538							7944	14299	
"	"	191 K	1	1	1	470	3660	5081	789	280	528	7172	135	1096	7195	12950	12
					2		3840	5332	828	294	499	7523	142	714	7545	13580	
					3		4188	5812		320	544	8204	154	778	8228	14809	
					4		4088	5912							8344	15019	
					5	523	3874	5603							7913	14243	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
JEFFERSON COUNTY (CON.)																	
WAYNE	PITTSBURGH	243	1	2	1	5.05	35.88	51.12	7.95	2.61	5.32	70.68	1.25	12.19	7147	12865	7
					2		37.79	53.84	8.37	2.75	5.01	74.44	1.32	8.11	7527	13549	
					3		41.24	58.76		3.00	5.47	81.24	1.44	8.85	8215	14787	
					4		40.27	59.73							8330	14994	
					5	5.51	38.01	56.38							7863	14153	
WELLS	"	180 A	1	1	1	3.79	38.78	50.03	7.40	3.84					7267	13081	13
					2		40.31	52.00	7.69	3.99					7553	13595	
					3		43.57	56.33		4.32					8182	14728	
					4		42.57	57.43							8315	14967	
					5	4.22	40.77	55.01							7966	14338	
"	"	180 B	1	1	1	4.28	37.41	50.29	8.02	3.72					7201	12962	13
					2		39.08	52.54	8.38	3.89					7523	13541	
					3		42.65	57.35		4.25					8211	14780	
					4		41.50	58.60							8349	15028	
					5	4.79	39.51	55.70							7949	14308	
"	"	180 K	1	1	1	4.11	37.96	50.23	7.70	3.84	5.23	71.69	1.39	10.15	7230	13014	13
					2		39.59	52.38	8.03	4.00	4.97	74.77	1.45	6.78	7540	13572	
					3		43.05	56.95		4.35	5.40	81.30	1.58	7.37	8198	14757	
					4		41.90	58.10							8335	15003	
					5	4.59	39.98	55.43							7953	14315	
"	"	181	1	2	1	4.89	33.10	51.55	10.46	4.09	5.03	68.01	1.12	11.29	6953	12515	7
					2		34.80	54.20	11.00	4.30	4.72	71.51	1.17	7.30	7310	13158	
					3		39.10	60.90		4.83	5.30	80.36	1.31	8.20	8213	14784	
					4		37.55	62.45							8385	15093	
					5	5.56	35.42	58.92							7911	14239	
"	"	182	1	1	1	5.27	34.87	49.16	10.70	3.07							4
					2		36.81	51.90	11.29	3.24							
					3		41.49	58.51		3.65							
					4		40.23	59.77									
					5	6.07	37.80	56.13									
"	"	183	1	1	1	4.78	35.93	53.98	5.31	.98	5.35	74.13	1.46	12.77	7417	13351	13
					2		37.73	56.69	5.58	1.03	5.06	77.85	1.53	8.95	7789	14020	
					3		39.96	60.04		1.09	5.36	82.45	1.62	9.48	8249	14849	
					4		39.47	60.53							8308	14954	
					5	5.10	37.46	57.44							7884	14192	
"	"	184	1	1	1	4.52	36.40	51.10	7.98	3.33					7157	12883	13
					2		38.12	53.52	8.36	3.49					7496	13493	
					3		41.60	58.40		3.81					8180	14724	
					4		40.49	59.51							8309	14956	
					5	5.05	38.44	56.51							7889	14200	
"	"	185	1	1	1	4.26	36.61	52.18	6.95	2.57					7307	13153	13
					2		38.24	54.50	7.26	2.68					7632	13738	
					3		41.23	58.77		2.89					8229	14813	
					4		40.35	59.65							8334	15001	
					5	4.58	38.45	56.87							7944	14300	
LAWRENCE COUNTY																	
AID	UPPER FREEPORT	329	1	2	1	8.45	31.25	49.02	11.28	.93	5.10	65.20	1.28	16.21	6405	11529	1
					2		34.13	53.55	12.32	1.02	4.54	71.22	1.40	9.50	6996	12593	
					3		38.93	61.07		1.16	5.18	81.23	1.60	10.83	7979	14362	
					4		38.01	61.99							8089	14561	
					5	9.68	34.33	55.99							7307	13152	
"	"	330	1	2	1	8.37	31.60	51.60	8.23	1.29	5.21	66.94	1.31	17.02	6596	11873	1
					2		34.70	56.32	8.98	1.41	4.67	73.05	1.43	10.46	7198	12956	
					3		38.12	61.88		1.55	5.13	80.26	1.57	11.49	7908	14234	
					4		37.53	62.67							7996	14393	
					5	9.26	33.88	56.86							7257	13062	
"	"	331	1	2	1	7.85	32.90	47.07	12.18	2.66	5.09	63.03	1.25	15.79	6305	11340	1
					2		35.70	51.08	13.22	2.89	4.58	68.40	1.35	9.56	6842	12316	
					3		41.14	58.86		3.33	5.28	78.81	1.56	11.02	7884	14192	
					4		39.80	60.20							8037	14467	
					5	9.19	36.15	54.66							7298	13136	
DECATUR	CLARION	363	1	2	1	6.11	38.43	45.52	9.94	3.61	5.42	65.53	1.22	14.28	6643	11957	1
					2		40.93	48.48	10.59	3.85	5.05	69.79	1.30	9.42	7075	12735	
					3		45.78	54.22		4.31	5.65	78.08	1.45	10.54	7913	14243	
					4		44.59	55.41							8061	14509	
					5	7.00	41.47	51.53							7496	13493	
"	"	364	1	2	1	6.34	35.30	40.95	17.41	5.29	4.91	57.92	1.07	13.40	5967	10741	1
					2		37.69	43.72	18.59	5.65	4.49	61.84	1.14	8.29	6371	11468	
					3		46.30	53.70		6.94	5.52	75.96	1.40	10.18	7826	14087	
					4		44.19	55.81							8090	14562	
					5	8.10	40.61	51.29							7434	13382	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
LAWRENCE COUNTY (CON.)																	
DECATUR	CLARION	365	1	2	1	5.86	37.25	41.61	15.88	5.36	5.06	60.22	1.18	12.90	6185	11133	1
					2		39.57	44.20	16.23	5.69	4.68	63.96	1.25	8.19	6570	11826	
					3		47.24	52.76		6.79	5.59	76.35	1.49	9.78	7843	14117	
					4		45.37	54.63							8082	14547	
					5	7.28	42.06	50.66							7494	13489	
ELIZABETH	LOWER KITTANNING	308	1	2	1	8.07	34.54	47.68	9.71	2.13	5.44	65.54	1.23	15.95	6626	11926	7
					2		37.57	51.87	10.66	2.32	4.94	71.29	1.34	9.55	7207	12973	
					3		42.01	57.99		2.59	5.52	79.71	1.50	10.68	8058	14505	
					4		41.00	59.00							8180	14724	
					5	9.13	37.26	53.61							7433	13379	
HAMILTON	UPPER MERCER	282	1	2	1	7.17	42.50	39.67	10.66	3.54					6554	11798	28
					2		45.78	42.74	11.48	3.81					7060	12709	
					3		51.72	48.28		4.30					7976	14357	
					4		50.68	49.32							8133	14640	
					5	8.29	46.48	45.23							7460	13428	
LAWRENCE	UPPER FREEPORT	328	1	2	1	7.20	32.25	49.88	10.67	2.33	5.03	65.03	1.25	15.69	6556	11801	1
					2		34.75	53.75	11.50	2.51	4.56	70.07	1.35	10.01	7065	12717	
					3		39.27	60.73		2.84	5.15	79.17	1.53	11.31	7983	14369	
					4		38.08	61.92							8115	14607	
					5	8.26	34.94	56.80							7444	13400	
MASON	WILGUS	204	1	2	1	6.95	39.08	46.42	7.55	3.60	5.43	66.83	1.33	15.26	6649	11968	28
					2		42.00	49.89	8.11	3.87	5.01	71.82	1.43	9.76	7145	12862	
					3		45.71	54.29		4.21	5.45	78.16	1.56	10.62	7776	13997	
					4		44.67	55.33							7898	14216	
					5	7.73	41.22	51.05							7287	13117	
PERRY	MIDDLE KITTANNING	475	1	2	1	6.64	34.28	48.16	10.92	3.32	5.16	64.95	1.23	14.42	6626	11927	7
					2		36.72	51.58	11.70	3.55	4.73	69.57	1.32	9.13	7097	12775	
					3		41.59	58.41		4.02	5.36	78.79	1.49	10.34	8037	14468	
					4		40.23	59.77							8194	14749	
					5	7.69	37.13	55.18							7564	13615	
SYMMES	WILGUS	206	1	2	1	8.15	38.48	45.90	7.47	2.83	5.40	66.18	1.28	16.84	6575	11835	28
					2		41.89	49.98	8.13	3.08	4.89	72.05	1.39	10.46	7158	12885	
					3		45.60	54.40		3.35	5.32	78.43	1.51	11.39	7791	14025	
					4		44.69	55.31							7901	14221	
					5	9.02	40.66	50.32							7188	12939	
"	UPPER FREEPORT	325	1	2	1	8.38	31.45	50.08	10.09	1.84	5.18	64.90	1.27	16.72	6497	11695	1
					2		34.33	54.66	11.01	2.01	4.64	70.83	1.39	10.12	7091	12764	
					3		38.68	61.42		2.26	5.21	79.60	1.56	11.37	7968	14343	
					4		37.52	62.48							8086	14555	
					5	9.51	33.95	56.54							7318	13172	
"	"	326	1	2	1	7.13	33.65	50.31	8.91	1.31	5.33	67.09	1.28	16.08	6716	12089	1
					2		36.23	54.17	9.60	1.41	4.89	72.24	1.37	10.49	7231	13016	
					3		40.08	59.92		1.56	5.41	79.91	1.52	11.60	7999	14398	
					4		39.27	60.73							8094	14569	
					5	7.95	36.16	55.89							7451	13411	
"	"	327	1	2	1	8.77	31.70	50.82	8.71	.76	5.32	66.88	1.25	17.08	6586	11855	1
					2		34.75	55.70	9.55	.83	4.77	73.30	1.37	10.18	7219	12994	
					3		38.42	61.58		.92	5.27	81.04	1.51	11.26	7981	14366	
					4		37.72	62.28							8064	14516	
					5	9.73	34.04	56.23							7280	13104	
UPPER	LOWER KITTANNING	146	1	2	1	7.57	38.51	45.13	8.79	3.20	5.59	66.71	1.27	14.44	6777	12199	7
					2		41.66	48.83	9.51	3.46	5.14	72.18	1.37	8.34	7332	13197	
					3		46.04	53.96		3.82	5.68	79.77	1.51	9.22	8103	14584	
					4		44.99	55.01							8238	14829	
					5	8.53	41.16	50.31							7537	13566	
WASHINGTON	CLARION	362	1	2	1	6.00	39.16	42.98	11.86	5.10	5.26	63.32	1.22	13.24	6519	11734	1
					2		41.66	45.72	12.52	5.43	4.88	67.36	1.30	8.41	6935	12483	
					3		47.68	52.32		6.22	5.58	77.09	1.49	9.62	7937	14286	
					4		46.15	53.85							8136	14645	
					5	7.11	42.86	50.03							7557	13603	
MAHONING COUNTY																	
GREEN	MIDDLE KITTANNING	471	1	2	1	5.04	40.14	51.31	3.51	1.06	5.42	74.14	1.41	14.46	7426	13366	21
					2		42.27	54.03	3.70	1.12	5.13	78.07	1.49	10.49	7819	14075	
					3		43.89	56.11		1.16	5.33	81.07	1.55	10.89	8119	14616	
					4		43.53	56.47							8165	14697	
					5	5.27	41.24	53.49							7734	13922	
"	"	473	1	2	1	5.23	36.86	53.19	4.72	2.17	5.50	73.84	1.41	12.36	7502	13504	7
					2		38.89	56.13	4.98	2.29	5.19	77.91	1.49	8.14	7916	14249	
					3		40.93	59.07		2.41	5.46	81.99	1.57	8.57	8331	14996	
					4		40.25	59.75							8411	15139	
					5	5.58	38.01	56.41							7942	14295	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Proximate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
MEIGS COUNTY																	
BEDFORD	REDSTONE	236	1	2	1	7.02	39.70	42.87	10.41	6.16					6463	11634	28
					2		42.70	46.11	11.19	6.63					6951	12512	
					3		48.08	51.92		7.47					7827	14089	
					4		46.46	53.54							8030	14454	
					5	8.22	42.65	49.13							7371	13267	
"	PITTSBURGH	209	1	2	1	5.43	42.40	41.19	10.98	6.80					6517	11731	28
					2		44.83	43.56	11.61	7.19					6891	12404	
					3		50.72	49.28		8.13					7796	14033	
					4		49.13	50.87							8013	14423	
					5	6.43	45.98	47.59							7498	13496	
"	"	241	1	2	1	21.45	32.49	36.80	9.26	1.64	5.32	48.91	1.05	33.82	4541	8173	28
					2		41.36	46.85	11.79	2.09	3.75	62.26	1.34	18.77	5781	10407	
					3		46.89	53.11		2.37	4.25	70.58	1.52	21.28	6554	11798	
					4		45.96	54.04							6646	11963	
					5	24.07	34.90	41.03							5045	9081	
RUTLAND	REDSTONE	234	1	2	1	7.63	33.33	48.11	10.93	1.83	5.20	65.29	1.03	15.72	6512	11722	7
					2		36.08	52.09	11.83	1.98	4.71	70.68	1.12	9.68	7050	12690	
					3		40.92	59.08		2.25	5.34	80.16	1.27	10.98	7996	14393	
					4		39.87	60.13							8121	14618	
					5	8.75	36.39	54.86							7411	13339	
SALISBURY	"	197	1	2	1	5.51	38.19	45.72	10.58	4.17	5.40	65.55	.95	13.35	6661	11990	7
					2		40.42	48.38	11.20	4.41	5.07	69.37	1.01	8.94	7049	12688	
					3		45.52	54.48		4.97	5.71	78.11	1.14	10.07	7938	14288	
					4		44.17	55.83							8103	14586	
					5	6.39	41.34	52.27							7586	13655	
"	"	230	1	2	1	7.22	32.82	50.67	9.29	1.32	5.39	66.47	1.10	16.43	6668	12002	7
					2		35.38	54.61	10.01	1.42	4.95	71.64	1.19	10.79	7187	12936	
					3		39.32	60.68		1.58	5.50	79.61	1.32	11.99	7986	14375	
					4		38.47	61.53							8084	14552	
					5	8.09	35.35	56.56							7431	13375	
"	"	231	1	2	1	7.33	34.59	49.39	8.69	2.05	5.53	66.71	1.06	15.96	6725	12105	7
					2		37.32	53.30	9.38	2.21	5.09	71.99	1.14	10.19	7257	13062	
					3		41.18	58.82		2.44	5.62	79.44	1.26	11.24	8008	14414	
					4		40.25	59.75							8116	14609	
					5	8.19	36.96	54.85							7452	13413	
"	"	232	1	2	1	6.05	41.96	43.76	8.23	2.61					6857	12342	28
					2		44.66	46.58	8.76	2.78					7298	13136	
					3		48.95	51.05		3.05					7999	14397	
					4		48.14	51.86							8112	14602	
					5	6.75	44.89	48.36							7565	13617	
SUTTON	"	235	1	2	1	4.85	36.28	46.35	12.52	2.94	5.32	65.29	1.17	12.76	6624	11923	7
					2		38.13	48.71	13.16	3.09	5.02	68.62	1.23	8.88	6962	12531	
					3		43.91	56.09		3.56	5.78	79.01	1.42	10.23	8017	14430	
					4		42.62	57.38							8177	14719	
					5	5.72	40.18	54.10							7709	13877	
MONROE COUNTY																	
ADAMS	UNIONTOWN	156	1	1	1	4.85	35.93	43.90	15.32	3.96	4.87	63.59	1.19	11.07	6412	11542	14
					2		37.76	46.14	16.10	4.16	4.55	66.83	1.25	7.11	6739	12130	
					3		45.01	54.99		4.96	5.42	79.66	1.49	8.47	8032	14458	
					4		43.33	56.67							8246	14842	
					5	5.97	40.75	53.28							7754	13957	
"	"	215	1	2	1	2.57	40.87	42.82	13.74	3.06	4.83	65.96	1.37	11.04	6573	11831	26
					2		41.95	43.94	14.11	3.15	4.73	67.68	1.40	8.93	6746	12143	
					3		48.84	51.16		3.67	5.51	78.79	1.63	10.40	7854	14138	
					4		47.65	52.35							8019	14435	
					5	3.08	46.17	50.75							7772	13989	
JACKSON	MIDDLE KITTANNING	581 1	3	3	1	1.22	22.13	22.00	54.65	2.12					3439	6190	51
					2		22.40	22.28	55.32	2.15					3482	6267	
					3		50.13	49.87		4.81					7793	14026	
					4		43.80	56.20							8758	15765	
					5	3.06	42.48	54.46							8490	15282	
"	"	581 2	3	3	1	1.27	29.58	37.70	31.45	3.96					5508	9914	51
					2		29.96	37.19	31.85	4.01					5578	10042	
					3		43.96	56.04		5.88					8185	14735	
					4		40.71	59.29							8624	15524	
					5	1.99	39.90	58.11							8453	15215	
"	"	581 3	3	3	1	1.35	36.66	50.22	11.77	3.39					7336	13204	51
					2		37.16	50.91	11.93	3.44					7436	13384	
					3		42.19	57.81		3.91					8443	15197	
					4		40.87	59.13							8613	15503	
					5	1.58	40.23	58.19							8477	15259	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
MONROE COUNTY (CON.)																	
MALAGA	FISHPOT	350	1	2	1	5.16	37.73	37.49	19.52	5.19	5.02	59.61	.95	9.61	6068	10922	27
					2		39.78	39.53	20.69	5.48	4.70	62.85	1.00	5.28	6398	11516	
					3		50.16	49.84		6.91	5.93	79.24	1.26	6.66	8067	14520	
					4		48.14	51.86							8367	15061	
					5	6.79	44.88	48.33							7799	14038	
PERRY	MEIGS CREEK	408	1	2	1	2.32	39.30	43.84	14.54	3.59	4.93	66.78	.95	9.21	6759	12167	27
					2		40.23	44.89	14.88	3.68	4.78	68.37	.97	7.32	6920	12456	
					3		47.26	52.74		4.32	5.62	80.32	1.14	8.60	8130	14633	
					4		45.87	54.13							8324	14983	
					5	2.82	44.58	52.60							8090	14562	
MORGAN COUNTY																	
BRISTOL	MEIGS CREEK	407	1	2	1	5.05	37.83	46.75	10.37	4.30	5.14	67.04	.89	12.26	6730	12114	7
					2		39.84	49.24	10.92	4.53	4.82	70.61	.94	8.18	7088	12758	
					3		44.72	55.28		5.09	5.41	79.26	1.06	9.18	7957	14322	
					4		43.35	56.65							8122	14620	
					5	5.84	40.82	53.34							7648	13766	
"	"	542	7	3	1	3.69	39.76	41.54	15.01	6.21					6497	11694	50
					2		41.28	43.13	15.59	6.45					6746	12142	
					3		48.90	51.10		7.64					7992	14385	
					4		47.04	52.96							8248	14846	
					5	4.59	44.89	50.52							7868	14163	
"	"	597	A1	3	3	2.20	37.42	43.47	16.91	7.40					6386	11496	53
					2		38.26	44.45	17.29	7.57					6530	11755	
					3		46.26	53.74		9.15					7895	14212	
					4		43.87	56.13							8190	14743	
					5	2.83	42.63	54.54							7958	14325	
"	"	597	A2	3	3	2.12	39.11	44.67	14.10	6.98					6640	11953	53
					2		39.96	45.64	14.40	7.13					6784	12212	
					3		46.68	53.32		8.33					7926	14267	
					4		44.65	55.35							8180	14724	
					5	2.52	43.48	53.90							7965	14337	
"	"	597	A3	3	3	2.16	40.74	45.99	11.11	4.82					6929	12472	53
					2		41.54	47.00	11.36	4.93					7081	12747	
					3		46.98	53.02		5.56					7988	14380	
					4		45.59	54.41							8168	14703	
					5	2.53	44.43	53.04							7961	14330	
"	"	597	A4	3	3	1.94	34.40	39.70	23.96	3.85					5819	10474	53
					2		35.08	40.49	24.43	3.93					5934	10681	
					3		46.42	53.58		5.20					7852	14133	
					4		44.16	55.84							8151	14673	
					5	2.59	42.98	54.33							7932	14278	
"	"	597	A5	3	3	2.18	43.99	47.57	6.26	4.81					7312	13162	53
					2		44.97	48.63	6.40	4.92					7475	13455	
					3		48.04	51.96		5.25					7986	14375	
					4		47.01	52.99							8119	14615	
					5	2.41	45.88	51.71							7924	14263	
"	"	597	A6	3	3	1.92	40.91	46.60	10.57	3.78					7004	12608	53
					2		41.71	47.51	10.78	3.85					7141	12855	
					3		46.75	53.25		4.32					8004	14408	
					4		45.58	54.42							8157	14683	
					5	2.21	44.58	53.21							7976	14356	
"	"	597	A7	3	3	2.03	39.18	45.87	13.52	4.05					6660	11988	53
					2		39.99	46.21	13.80	4.13					6797	12236	
					3		46.39	53.61		4.79					7886	14195	
					4		44.96	55.04							8068	14524	
					5	2.44	43.86	53.70							7872	14170	
"	"	597	A8	3	3	1.85	39.57	43.10	15.48	3.39					6516	11729	53
					2		40.32	43.91	15.77	3.45					6639	11950	
					3		47.87	52.13		4.10					7882	14188	
					4		46.48	53.52							8070	14527	
					5	2.27	45.42	52.31							7887	14197	
"	"	597	A9	3	3	2.14	39.59	44.78	13.49	4.93	4.97	66.13	1.03	9.45	6704	12067	53
					2		40.46	45.76	13.78	5.04	4.84	67.58	1.05	7.71	6851	12331	
					3		46.93	53.07		5.85	5.61	78.38	1.22	8.94	7946	14302	
					4		45.35	54.65							8149	14669	
					5	2.59	44.17	53.24							7939	14290	
"	"	597	B1	3	3	1.92	38.25	42.43	17.40	4.91	4.74	62.09	.96	9.90	6318	11373	53
					2		39.00	43.26	17.74	5.01	4.62	63.30	.98	8.35	6442	11596	
					3		47.41	52.59		6.09	5.62	76.95	1.19	10.15	7831	14097	
					4		45.56	54.44							8072	14530	
					5	2.45	44.44	53.11							7874	14174	
"	"	597	B2	3	3	1.78	31.28	30.86	36.08	3.28					4720	8497	53
					2		31.85	31.42	36.73	3.34					4806	8651	
					3		50.34	49.66		5.28					7596	13673	
					4		47.14	52.86							8058	14504	
					5	3.01	45.72	51.27							7816	14069	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
MORGAN COUNTY (CON.)																	
BRISTOL	MEIGS CREEK	597 B3	3	3	1	1.96	36.46	38.83	22.75	5.31					5777	10399	53
					2		37.19	39.61	23.20	5.42					5892	10607	
					3		48.42	51.58		7.06					7672	13811	
					4		46.09	53.91							7979	14363	
					5	2.70	44.85	52.45							7764	13975	
"	"	597 C1	3	3	1	2.35	38.59	45.80	13.26	5.56					6641	11954	53
					2		39.52	46.90	13.58	5.69					6801	12242	
					3		45.73	54.27		6.58					7870	14166	
					4		43.99	56.01							8081	14546	
					5	2.84	42.74	54.42							7851	14132	
"	"	597 C2	3	3	1	2.11	33.79	37.06	27.04	3.16					5494	9889	53
					2		34.52	37.86	27.62	3.23					5612	10102	
					3		47.69	52.31		4.46					7754	13957	
					4		45.35	54.65							8074	14534	
					5	3.06	43.96	52.98							7828	14091	
"	"	597 C3	3	3	1	2.32	39.71	44.09	13.88	5.07					6560	11809	53
					2		40.65	45.14	14.21	5.19					6716	12089	
					3		47.38	52.62		6.05					7828	14091	
					4		45.77	54.23							8034	14462	
					5	2.82	44.48	52.70							7808	14054	
"	"	597 C4	3	3	1	1.80	29.08	30.23	38.89	2.50					4458	8024	53
					2		29.61	30.79	39.60	2.65					4540	8171	
					3		49.02	50.98		4.22					7517	13528	
					4		45.54	54.46							8004	14407	
					5	3.18	44.09	52.73							7750	13950	
"	"	597 C9	3	3	1	2.36	38.32	43.56	15.56	5.20	4.76	63.15	.97	10.26	6430	11575	53
					2		39.25	44.71	16.04	5.33	4.61	64.67	.99	8.36	6585	11855	
					3		46.75	53.25		6.35	5.49	77.02	1.18	9.96	7843	14120	
					4		44.94	55.06							8073	14532	
					5	2.94	43.61	53.45							7836	14104	
CENTER	"	495		1	2	2.53	41.22	42.40	13.85	5.66					6680	12024	29
					2		42.29	43.50	14.21	5.81					6853	12336	
					3		49.29	50.71		6.77					7988	14379	
					4		47.67	52.33							8215	14787	
					5	3.09	46.19	50.72							7962	14331	
HOMER	PITTSBURGH	239		1	2	4.80	42.22	43.03	9.95	5.19					6600	11880	29
					2		44.35	45.20	10.45	5.45					6933	12479	
					3		49.63	50.47		6.09					7742	13935	
					4		48.22	51.78							7912	14241	
					5	5.56	45.54	48.90							7472	13450	
"	"	240		1	2	6.87	40.65	44.39	8.19	4.22	5.32	67.39	.90	13.98	6722	12100	7
					2		43.54	47.67	8.79	4.53	4.90	72.36	.96	8.46	7218	12992	
					3		47.74	52.26		4.97	5.37	79.33	1.05	9.28	7914	14244	
					4		46.61	53.39							8058	14504	
					5	7.73	43.01	49.26							7435	13383	
MANCHESTER	MEIGS CREEK	406		1	2	4.07	37.61	47.66	10.66	5.07	5.10	66.19	.87	12.11	6779	12202	7
					2		39.21	49.68	11.11	5.29	4.84	69.00	.91	8.85	7067	12720	
					3		44.11	55.89		5.95	5.44	77.63	1.02	9.96	7950	14310	
					4		42.55	57.45							8132	14638	
					5	4.75	40.52	54.73							7746	13942	
MEIGSVILLE	"	405		1	2	5.13	36.07	47.06	11.74	4.89	5.06	64.77	.87	12.67	6625	11925	7
					2		38.02	49.60	12.38	5.15	4.73	68.27	.92	8.55	6983	12569	
					3		43.39	56.61		5.88	5.40	77.91	1.05	9.76	7970	14345	
					4		41.73	58.27							8162	14692	
					5	6.06	39.20	54.74							7668	13802	
WINDSOR	WAYNESBURG A	499		1	2	4.08	38.54	50.26	7.12	4.45	6.30	58.40	1.08	22.65	6197	11154	29
					2		40.18	52.40	7.42	4.64	6.10	60.88	1.13	19.83	6460	11628	
					3		43.40	56.60		5.01	6.59	65.76	1.22	21.42	6978	12560	
					4		42.19	57.81							7079	12742	
					5	4.54	40.27	55.19							6758	12165	
MUSKINGUM COUNTY																	
ADAMS	MIDDLE KITTANNING	474		1	2	5.63	44.70	44.84	4.83	3.32	5.69	71.41	1.25	13.50	7206	12971	17
					2		47.37	47.51	5.12	3.51	5.37	75.67	1.33	9.00	7635	13743	
					3		49.93	50.07		3.70	5.66	79.75	1.40	9.49	8047	14485	
					4		49.23	50.77							8145	14661	
					5	6.06	46.24	47.70							7653	13775	
BLUE ROCK	MEIGS CREEK	404		1	2	5.16	40.12	41.58	13.14	5.07	5.22	63.25	.86	12.46	6429	11572	17
					2		42.30	43.84	13.86	5.34	4.90	66.69	.90	8.31	6779	12202	
					3		49.11	50.89		6.20	5.69	77.42	1.04	9.65	7870	14165	
					4		47.57	52.43							8077	14538	
					5	6.22	44.61	49.17							7574	13633	
BRUSH CREEK	UPPER FREEPORT	324		1	2	4.72	43.47	44.25	7.56	5.00	5.55	68.27	1.32	12.30	7046	12683	2
					2		45.62	46.45	7.93	5.25	5.28	71.65	1.38	8.51	7395	13311	
					3		49.55	50.45		5.70	5.73	77.83	1.50	9.24	8032	14457	
					4		48.43	51.57							8187	14736	
					5	5.30	45.87	48.83							7753	13956	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
									MUSKINGUM COUNTY (CON.)								
BRUSH CREEK	MIDDLE KITTANNING	468	1	2	1	5.55	44.36	42.85	7.14	4.43	5.64	68.35	1.02	13.42	6960	12528	17
					2		47.01	45.42	7.57	4.70	5.31	72.44	1.08	8.90	7377	13278	
					3		50.86	49.14		5.08	5.74	78.38	1.17	9.63	7981	14365	
					4		49.39	50.11							8120	14616	
					5	6.29	46.76	46.95							7609	13696	
"	"	470	1	2	1	5.08	39.75	45.40	9.77	5.54	5.32	65.74	1.14	12.49	6802	12244	2
					2		41.88	47.83	10.29	5.84	5.01	69.25	1.20	8.41	7166	12899	
					3		46.58	53.32		6.51	5.58	77.20	1.34	9.37	7988	14379	
					4		45.20	54.80							8175	14715	
					5	5.88	42.54	51.58							7694	13850	
"	"	558	1	1	1	4.10	38.36	38.17	19.37	6.04	4.87	58.31	1.05	10.36	5962	10731	50
					2		40.00	39.80	20.20	6.30	4.60	60.80	1.10	7.00	6217	11190	
					3		50.13	49.87		7.89	5.76	76.20	1.38	8.77	7791	14023	
					4		48.00	52.00							8086	14555	
					5	5.41	45.40	49.19							7648	13766	
CLAY	"	559	1	1	1	4.00	40.70	42.53	12.77	5.18	5.05	64.22	1.06	11.72	6480	11664	50
					2		42.40	44.30	13.30	5.40	4.80	66.90	1.10	8.50	6750	12150	
					3		48.90	51.10		6.23	5.54	77.16	1.27	9.80	7785	14014	
					4		47.39	52.61							7984	14371	
					5	4.80	45.11	50.09							7601	13682	
HARRISON	ANDERSON	385	1	2	1	5.56	42.72	39.92	11.70	4.38	5.30	63.61	1.03	13.48	6579	11842	17
					2		45.28	42.32	12.40	5.17	4.95	67.43	1.09	8.96	6974	12552	
					3		51.69	48.31		5.90	5.65	76.98	1.24	10.23	7961	14329	
					4		50.40	49.60							8153	14676	
					5	6.68	47.04	46.28							7609	13696	
"	UPPER FREEPORT	322	1	2	1	4.89	42.35	44.98	7.78	4.36	5.53	67.74	1.17	13.42	6944	12499	2
					2		44.53	47.29	8.18	4.58	5.25	71.22	1.23	9.54	7301	13142	
					3		48.50	51.50		4.99	5.72	77.56	1.34	10.39	7951	14313	
					4		47.43	52.57							8093	14567	
					5	5.48	44.83	49.69							7649	13768	
"	"	323	1	2	1	4.27	45.63	41.07	9.03	5.23	5.36	67.98	1.12	11.28	6967	12541	17
					2		47.67	42.90	9.43	5.46	5.11	71.01	1.17	7.82	7278	13100	
					3		52.63	47.37		6.03	5.64	78.41	1.29	8.63	8036	14464	
					4		51.53	48.47							8209	14776	
					5	4.89	49.00	46.11							7808	14054	
"	MIDDLE KITTANNING	469	1	2	1	4.57	40.32	45.18	9.83	4.10	5.38	67.71	1.16	11.82	6873	12371	2
					2		42.30	47.39	10.31	4.30	5.10	71.03	1.21	8.05	7210	12978	
					3		47.16	52.84		4.79	5.69	79.19	1.35	8.98	8039	14470	
					4		45.96	54.04							8197	14755	
					5	5.36	43.49	51.15							7757	13963	
HOPEWELL	CLARION	361	1	2	1	6.89	41.49	42.92	8.70	3.02	5.57	67.28	1.19	14.24	6706	12071	17
					2		44.56	46.10	9.34	3.24	5.16	72.26	1.28	8.72	7202	12964	
					3		49.15	50.85		3.57	5.69	79.71	1.41	9.62	7944	14300	
					4		48.24	51.76							8070	14526	
					5	7.75	44.50	47.75							7446	13402	
JACKSON	QUAKERTOWN	225	1	2	1	9.80	35.12	49.10	5.98	1.37	5.79	68.78	1.21	16.87	6745	12142	17
					2		38.94	54.43	6.63	1.52	5.21	76.25	1.34	9.05	7478	13460	
					3		41.71	58.29		1.63	5.58	81.66	1.44	9.69	8009	14416	
					4		41.09	58.91							8082	14547	
					5	10.66	36.75	52.59							7229	13012	
LICKING	BEDFORD	381	1	2	1	5.56	39.49	44.93	10.02	2.82	5.32	67.35	1.25	13.24	6719	12094	17
					2		41.81	47.58	10.61	2.99	4.98	71.31	1.32	8.79	7115	12806	
					3		46.77	53.23		3.34	5.57	79.78	1.48	9.83	7960	14326	
					4		45.76	54.24							8092	14565	
					5	6.35	42.86	50.79							7578	13641	
MADISON	LOWER FREEPORT	345	1	2	1	5.35	44.46	43.53	6.86	2.09	5.85	70.03	1.40	13.77	7099	12778	17
					2		46.97	45.78	7.25	2.20	5.56	73.99	1.47	9.53	7500	13500	
					3		50.54	49.56		2.37	5.99	79.77	1.59	10.28	8086	14555	
					4		50.03	49.97							8178	14721	
					5	5.85	47.11	47.04							7700	13860	
"	MIDDLE KITTANNING	465	1	2	1	6.13	44.25	44.42	5.20	3.64	5.76	70.02	1.22	14.16	7108	12794	17
					2		47.14	47.32	5.54	3.88	5.41	74.59	1.30	9.28	7572	13629	
					3		49.90	50.10		4.11	5.73	78.96	1.38	9.82	8016	14428	
					4		49.13	50.87							8123	14622	
					5	6.54	45.87	47.49							7584	13652	
"	"	466	1	2	1	4.62	40.95	47.85	6.58	4.49	5.47	69.58	1.30	12.58	7126	12827	2
					2		42.93	50.17	6.90	4.71	5.20	72.95	1.36	8.88	7471	13448	
					3		46.11	53.89		5.06	5.59	78.35	1.46	9.54	8025	14445	
					4		45.01	54.99							8159	14687	
					5	5.11	42.72	52.17							7743	13937	
"	"	467	1	2	1	4.75	39.88	46.09	9.28	5.35	5.35	66.69	1.28	12.05	6854	12337	2
					2		41.87	48.39	9.74	5.62	5.06	70.02	1.34	8.22	7196	12952	
					3		46.39	53.61		6.23	5.61	77.57	1.48	9.11	7973	14350	
					4		44.96	55.04							8148	14667	
					5	5.46	42.51	52.03							7704	13867	
MONROE	"	462	1	2	1	5.88	43.81	46.51	3.80	2.98	5.74	72.18	1.27	14.03	7308	13154	17
					2		46.55	49.41	4.04	3.17	5.41	76.68	1.35	9.35	7764	13975	
					3		48.51	51.49		3.30	5.64	79.91	1.41	9.74	8091	14563	
					4		47.88	52.12							8175	14715	
					5	6.24	44.89	48.87							7665	13797	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
MUSKINGUM COUNTY (CON.)																	
MONROE	MIDDLE KITTANNING	463	1	2	1	552	4473	4512	463	350	566	7090	111	1420	7241	13034	17
					2		4734	4776	490	370	535	7504	118	983	7664	13795	
					3		4978	5082		389	563	7890	124	1034	8059	14506	
					4		4906	5094							8159	14686	
					5	593	4616	4791							7676	13816	
MUSKINGUM	"	464	1	2	1	565	4027	4895	523	363	557	7054	126	1377	7191	12944	2
					2		4263	5183	554	384	524	7469	133	936	7614	13705	
					3		4513	5487		407	555	7906	141	991	8061	14509	
					4		4423	5577							8168	14703	
					5	601	4158	5241							7677	13819	
NEWTON	"	461	1	2	1	502	3816	4726	956	597	529	6588	112	1218	6758	12164	2
					2		4018	4976	1006	629	498	6936	118	813	7115	12807	
					3		4467	5533		699	554	7712	131	904	7911	14239	
					4		4302	5698							8101	14581	
					5	581	4052	5367							7631	13735	
"	LOWER KITTANNING	306	1	2	1	796	3918	4687	599	240	554	6840	137	1630	6893	12407	17
					2		4257	5092	651	261	506	7431	149	1002	7489	13480	
					3		4553	5447		279	541	7949	159	1072	8010	14419	
					4		4480	5520							8102	14584	
					5	863	4093	5044							7403	13325	
PERRY	UPPER FREEPORT	321	1	2	1	928	3890	4363	819	362	560	6571	97	1591	6584	11851	17
					2		4288	4809	903	399	504	7243	107	844	7257	13063	
					3		4714	5286		439	564	7961	118	928	7977	14360	
					4		4606	5394							8116	14609	
					5	1041	4127	4832							7271	13088	
SALT CREEK	ANDERSON	384	1	2	1	661	3984	4496	859	208	561	6890	132	1350	6854	12337	17
					2		4266	4814	920	222	523	7377	141	817	7339	13210	
					3		4698	5302		244	576	8125	155	900	8083	14548	
					4		4619	5381							8191	14744	
					5	738	4278	4984							7587	13656	
UNION	PITTSBURGH	238	1	2	1	671	4017	4198	1114	520					6496	11693	27
					2		4306	4500	1194	558					6963	12534	
					3		4890	5110		634					7907	14233	
					4		4745	5255							8102	14583	
					5	788	4371	4841							7463	13433	
WASHINGTON	MIDDLE KITTANNING	460	1	2	1	544	3915	4613	988	377	534	6716	118	1327	6822	12280	2
					2		4140	4879	981	399	501	7102	125	892	7214	12985	
					3		4590	5410		442	555	7875	139	989	7999	14397	
					4		4474	5526							8144	14660	
					5	619	4198	5183							7642	13755	
"	LOWER KITTANNIN	305	1	2	1	505	3975	4743	777	480	537	6807	118	1281	6983	12569	2
					2		4186	4996	818	506	507	7169	124	876	7354	13237	
					3		4559	5441		551	552	7808	135	954	8009	14416	
					4		4433	5567							8162	14691	
					5	558	4182	5250							7699	13858	
WAYNE	UPPER FREEPORT	320	1	2	1	511	3550	4679	1260	384	511	6481	125	1239	6558	11804	2
					2		3741	4931	1328	405	478	6830	132	827	6911	12440	
					3		4314	5686		467	551	7876	152	954	7969	14345	
					4		4162	5838							8149	14668	
					5	606	3911	5483							7654	13778	
"	MIDDLE KITTANNING	459	1	2	1	593	4569	4254	584	371	567	6721	124	1633	7067	12721	17
					2		4856	4523	621	394	532	7145	132	1176	7512	13522	
					3		5178	4822		420	567	7618	141	1254	8009	14417	
					4		5101	4899							8124	14623	
					5	647	4772	4581							7598	13677	
"	LOWER KITTANNING	304	1	2	1	587	4152	4391	870	479	538	6667	116	1330	6771	12188	7
					2		4411	4665	924	509	502	7083	123	859	7193	12947	
					3		4860	5140		561	553	7804	136	946	7925	14265	
					4		4739	5261							8084	14552	
					5	657	4423	4910							7546	13583	
"	TIONESTA	217	1	2	1	850	3644	4589	917	130	549	6531	113	1760	6511	11720	17
					2		3983	5015	1002	142	497	7138	123	1098	7116	12809	
					3		4427	5573		158	562	7933	137	1220	7908	14235	
					4		4351	5649							8006	14410	
					5	951	3937	5112							7244	13040	
NOBLE COUNTY																	
BEAVER	MEIGS CREEK	172	1	1	1	414	3842	4482	1262	361	522	6687	120	1048	6739	12130	14
					2		4008	4675	1317	377	497	6976	125	708	7030	12654	
					3		4616	5384		434	572	8035	144	815	8096	14573	
					4		4482	5518							8274	14893	
					5	491	4262	5247							7867	14161	
"	"	587	1[16]	1	3	1	449	2897	3727	2927	1401					5118	9214	52
						2		3033	3902	3055	1467					5359	9647	
						3		4373	5627		2115					7727	13911	
						4		3741	6259							8417	15151	
						5	740	3465	5795							7794	14029	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
						NOBLE COUNTY (CON.)											
BEAVER	MEIGS CREEK	587	2	1	3	1	4.56	39.92	44.44	10.98	4.21						
						2		41.87	46.61	11.52	4.42				7205	12968	
						3		47.32	52.68		5.00				8143	14656	
						4		46.03	53.97						8319	14974	
						5	5.43	43.53	51.04						7867	14161	
"	"	587	3	1	3	1	3.96	38.35	44.16	13.53	4.18				6700	12060	52
						2		39.93	45.98	14.09	4.35				6976	12557	
						3		46.48	53.52		5.06				8121	14618	
						4		44.98	55.02						8321	14977	
						5	4.77	42.84	52.39						7924	14263	
"	"	587	4	1	3	1	3.65	38.50	43.51	14.34	5.00				6631	11936	52
						2		39.96	45.16	14.88	5.19				6882	12388	
						3		46.95	53.05		6.10				8085	14553	
						4		45.26	54.74						8311	14960	
						5	4.46	43.24	52.30						7941	14293	
"	"	587	9	1	3	1	3.97	38.68	44.06	13.29	4.49	4.98	64.30	1.02	11.92	6686	12036	52
						2		40.28	45.88	13.84	4.68	4.72	66.96	1.06	8.74	6962	12534	
						3		46.75	53.25		5.43	5.48	77.72	1.23	10.14	8080	14547	
						4		45.22	54.78							8285	14913	
						5	4.77	43.07	52.16							7889	14200	
BROOKFIELD	"	402		1	2	1	4.85	37.28	48.05	9.82	5.59	5.26	66.01	.97	12.35	6834	12301	7
						2		39.18	50.50	10.32	5.87	4.96	69.37	1.01	8.47	7182	12928	
						3		43.69	56.31		6.65	5.53	77.35	1.13	9.44	8008	14416	
						4		42.05	57.95							8197	14755	
						5	5.62	39.69	54.69							7737	13927	
"	"	403		1	2	1	3.54	37.41	45.82	13.23	6.21	5.12	64.44	.88	10.12	6642	11956	7
						2		38.78	47.50	13.72	6.44	4.90	66.80	.91	7.23	6886	12395	
						3		44.95	55.05		7.46	5.68	77.43	1.05	8.38	7981	14366	
						4		43.00	57.00							8216	14788	
						5	4.30	41.15	54.55							7862	14151	
"	"	543	1[11]1	3		1	2.35	37.68	42.08	17.89	7.50					6065	10918	49
						2		38.59	43.09	18.32	7.68					6211	11181	
						3		47.25	52.75		9.40					7604	13689	
						4		44.81	55.19							7893	14208	
						5	3.07	43.43	53.50							7651	13772	
"	"	543	2[11]1	3		1	2.75	37.47	46.46	13.32	6.21					6334	11401	49
						2		38.53	47.77	13.70	6.39					6512	11723	
						3		44.65	55.35		7.40					7546	13584	
						4		42.70	57.30							7756	13960	
						5	3.35	41.26	55.39							7496	13492	
"	"	543	3[11]1	3		1	3.26	38.16	50.36	8.22	4.04					6920	12457	49
						2		39.44	52.06	8.50	4.18					7153	12877	
						3		43.10	56.90		4.57					7817	14073	
						4		41.90	58.10							7951	14311	
						5	3.57	40.36	55.97							7658	13785	
"	"	543	4[11]1	3		1	3.23	33.75	44.33	18.59	2.69					6079	10943	49
						2		34.88	45.81	19.31	2.78					6282	11308	
						3		43.23	56.77		3.45					7785	14014	
						4		41.52	58.48							7994	14390	
						5	4.12	39.81	56.07							7666	13798	
"	"	543	9[11]1	3		1	2.84	37.21	45.96	13.99	5.50					6375	11476	49
						2		38.30	47.30	14.40	5.66					6561	11811	
						3		44.74	55.26		6.61					7665	13798	
						4		42.89	57.11							7874	14173	
						5	3.47	41.40	55.13							7601	13682	
"	"	598	A1	3	3	1	2.47	41.16	45.70	10.67	3.58					6874	12373	53
						2		42.20	46.86	10.94	3.67					7048	12686	
						3		47.38	52.62		4.12					7914	14244	
						4		46.26	53.74							8061	14510	
						5	2.86	44.93	52.21							7831	14096	
"	"	598	A2	3	3	1	2.28	38.43	42.52	16.77	5.28					6329	11392	53
						2		39.33	43.51	17.16	5.40					6477	11658	
						3		47.48	52.52		6.52					7819	14073	
						4		45.60	54.40							8060	14508	
						5	2.89	44.28	52.83							7827	14089	
"	"	598	A3	3	3	1	2.22	41.55	47.59	8.54	3.36					7151	12873	53
						2		42.60	48.67	8.73	3.44					7313	13165	
						3		46.67	53.33		3.77					8012	14424	
						4		45.70	54.30							8140	14652	
						5	2.50	44.55	52.95							7937	14287	
"	"	598	A4	3	3	1	2.28	41.24	47.71	8.77	4.29					7052	12695	53
						2		42.20	48.82	8.98	4.39					7217	12991	
						3		46.36	53.64		4.32					7929	14273	
						4		45.20	54.80							8073	14532	
						5	2.59	44.03	53.38							7864	14155	
"	"	598	A5	3	3	1	2.12	34.43	39.95	23.50	5.88					5736	10326	53
						2		35.18	40.82	24.00	6.01					5860	10550	
						3		46.29	53.71		7.91					7711	13882	
						4		43.60	56.40							8046	14482	
						5	2.97	42.30	54.73							7807	14053	

Township	Seam	File number (1)	Kind (2)	Source (3)	Condition (4)	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
								NOBLE COUNTY (CON.)									
BROOKFIELD	MEIGS CREEK	598 A9	3	3	1	2.41	37.79	43.25	16.55	4.88	4.76	62.88	1.01	9.92	6361	11450	53
					2		38.72	44.32	16.96	5.00	4.60	64.43	1.04	7.97	6518	11733	
					3		46.63	53.37		6.02	5.54	77.59	1.25	9.60	7849	14129	
					4		44.80	55.20							8082	14548	
					5	3.03	43.45	53.52							7837	14106	
"	"	598 B1[17]	3	3	1	2.17	24.38	30.16	43.29	13.50					3846	6923	53
					2		24.92	30.83	44.25	13.80					3931	7077	
					3		44.70	55.30		24.75					7051	12694	
					4		35.55	64.45							7952	14314	
					5	4.74	33.86	61.40							7575	13635	
"	"	598 B2	3	3	1	2.55	37.70	41.20	18.55	8.62					6120	11016	53
					2		38.69	42.28	19.03	8.85					6280	11304	
					3		47.78	52.22		10.93					7756	13961	
					4		45.09	54.91							8091	14564	
					5	3.39	43.56	53.05							7817	14071	
"	"	598 B3	3	3	1	2.62	39.48	44.55	13.35	4.35					6607	11894	53
					2		40.54	45.75	13.71	4.47					6785	12214	
					3		46.98	53.02		5.18					7863	14155	
					4		45.51	54.49							8052	14493	
					5	3.15	44.08	52.77							7798	14036	
"	"	598 B4	3	3	1	2.46	39.47	44.89	13.18	3.64					6700	12060	53
					2		40.47	46.02	13.51	3.73					6869	12364	
					3		46.79	53.21		4.31					7942	14295	
					4		45.46	54.54							8116	14609	
					5	2.94	44.12	52.94							7878	14180	
"	"	598 B5	3	3	1	2.21	35.07	40.25	22.47	5.23					5805	10449	53
					2		35.86	41.16	22.98	5.35					5936	10685	
					3		46.56	53.44		6.95					7707	13873	
					4		44.13	55.87							8012	14421	
					5	3.03	42.80	54.17							7768	13983	
"	"	598 B9	3	3	1	2.64	37.62	42.50	17.24	4.98	4.69	62.55	.93	9.61	6277	11299	53
					2		38.64	43.65	17.71	5.12	4.51	64.25	.95	7.46	6447	11605	
					3		46.96	53.04		6.22	5.48	78.08	1.15	9.07	7834	14103	
					4		45.06	54.94							8077	14539	
					5	3.36	43.55	53.09							7806	14051	
"	"	598 C1	3	3	1	3.33	37.13	44.16	15.38	5.94					6311	11361	53
					2		38.41	45.68	15.91	6.14					6528	11752	
					3		45.68	54.32		7.30					7763	13976	
					4		43.66	56.34							8004	14407	
					5	4.16	41.84	54.00							7672	13809	
"	"	598 C2	3	3	1	3.19	36.67	42.42	17.72	5.56					6136	11045	53
					2		37.88	43.82	18.30	5.74					6338	11409	
					3		46.36	53.64		7.03					7758	13965	
					4		44.27	55.73							8016	14429	
					5	4.10	42.45	53.45							7688	13839	
"	"	598 C3	3	3	1	3.63	39.88	45.76	10.83	4.22					6777	12199	53
					2		41.34	47.43	11.23	4.37					7025	12645	
					3		46.57	53.43		4.92					7914	14245	
					4		45.27	54.73							8077	14539	
					5	4.11	43.41	52.48							7746	13942	
"	"	598 C4	3	3	1	2.89	32.61	35.01	29.49	7.33					5115	9208	53
					2		33.58	36.05	30.37	7.55					5267	9482	
					3		48.23	51.77		10.84					7564	13618	
					4		44.62	55.38							8023	14441	
					5	4.51	42.60	52.89							7661	13789	
"	"	598 C9	3	3	1	3.14	36.76	41.84	18.26	5.56					6124	11023	53
					2		37.95	43.20	18.85	5.74					6323	11380	
					3		46.77	53.23		7.07					7792	14023	
					4		44.64	55.36							8057	14503	
					5	4.07	42.83	53.10							7731	13915	
CENTER	"	401	1	2	1	4.52	41.13	44.01	10.24	4.17					6791	12224	27
					2		43.12	46.14	10.74	4.37					7120	12816	
					3		48.31	51.69		4.90					7977	14358	
					4		47.11	52.89							8138	14649	
					5	5.33	44.60	50.07							7704	13867	
ELK	"	400	1	2	1	3.06	38.43	46.18	12.33	6.00	5.11	66.18	.86	9.52	6865	12357	7
					2		39.64	47.64	12.72	6.19	4.92	68.27	.89	7.01	7082	12747	
					3		45.42	54.58		7.09	5.64	78.22	1.02	8.03	8114	14605	
					4		43.62	56.38							8339	15011	
					5	3.67	42.03	54.30							8033	14460	
"	"	497	1	2	1	1.61	45.09	42.05	11.35	5.45	4.12	68.66	1.12	9.30	7063	12713	29
					2		45.78	42.68	11.54	5.53	4.01	69.70	1.14	8.08	7171	12007	
					3		51.75	48.25		6.25	4.53	78.80	1.29	9.13	8106	14591	
					4		50.47	49.53							8304	14948	
					5	1.78	49.56	48.66							8156	14680	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
								NOBLE COUNTY (CON.)									
ELK	MEIGS CREEK	572 1	1	3	1	279	3633	4056	2032	593					6200	11160	51
					2		3737	4172	2091	610					6378	11480	
					3		4725	5275		771					8064	14515	
					4		4490	5510							8383	15089	
					5	373	4323	5304							8069	14525	
"	"	572 2	1	3	1	224	4036	4374	1366	627					6736	12125	51
					2		4128	4474	1398	641					6890	12403	
					3		4799	5201		745					8010	14419	
					4		4620	5380							8249	14848	
					5	274	4494	5232							8022	14440	
ENOCH	"	398	1	2	1	290	3724	4970	1016	427	522	6853	104	1078	7051	12690	7
					2		3835	5119	1046	440	505	7058	107	844	7261	13069	
					3		4283	5717		491	564	7883	119	943	8109	14596	
					4		4144	5856							8273	14892	
					5	335	4005	5660							7997	14394	
"	"	399	1	2	1	386	4491	3962	1161	535					6836	12304	27
					2		4671	4121	1208	556					7110	12799	
					3		5313	4687		632					8087	14558	
					4		5187	4813							8292	14925	
					5	457	4950	4593							7912	14241	
"	"	596 A1	1	3	1	456	3853	4355	1326	581					6550	11790	53
					2		4041	4568	1391	609					6870	12366	
					3		4694	5306		707					7980	14364	
					4		4516	5484							8209	14776	
					5	565	4261	5174							7746	13942	
"	"	596 A2	1	3	1	407	3787	4307	1499	535					6461	11631	53
					2		3948	4490	1552	558					6735	12124	
					3		4679	5321		661					7982	14368	
					4		4496	5504							8219	14795	
					5	503	4270	5227							7807	14052	
"	"	596 A3	1	3	1	406	3661	4304	1629	639					6344	11419	53
					2		3816	4486	1698	666					6612	11902	
					3		4596	5404		802					7964	14336	
					4		4377	5683							8240	14832	
					5	515	4151	5334							7816	14069	
"	"	596 A4[18]	1	3	1	367	1624	1342	6667	359					1756	3161	53
					2		1686	1393	6921	373					1823	3281	
					3		5476	4584		1211					5921	10656	
					4		4237	5763							7409	13337	
					5	1410	3640	4950							6366	11458	
"	"	596 A9	1	3	1	428	3782	4323	1467	574					6466	11640	53
					2		3951	4516	1533	500					6755	12160	
					3		4656	5334		709					7978	14362	
					4		4477	5523							8221	14798	
					5	528	4241	5231							7787	14016	
"	"	596 B1	1	3	1	570	3267	3906	2257	462					5644	10160	53
					2		3465	4142	2393	490					5985	10774	
					3		4555	5445		644					7868	14163	
					4		4307	5693							8186	14734	
					5	780	3970	5250							7548	13586	
"	"	596 B2	1	3	1	911	1204	794	7091	205					1084	1951	53
					2		1325	873	7802	226					1193	2147	
					3		6028	3972		1028					5428	9768	
					4		4211	5789							7796	14032	
					5	4087	2489	3424							4607	8293	
"	"	596 B3	1	3	1	513	3533	3799	2155	340					5778	10401	53
					2		3724	4004	2272	358					6090	10963	
					3		4819	5181		463					7880	14186	
					4		4625	5375							8152	14673	
					5	685	4308	5007							7593	13668	
"	"	596 B9	1	3	1	604	3042	3440	2914	396					5034	9062	53
					2		3238	3661	3101	421					5358	9645	
					3		4693	5307		610					7766	13980	
					4		4395	5605							8165	14697	
					5	910	3995	5095							7422	13359	
"	"	603 A1[19]1	1	3	1	293	3851	4299	1557	611	490	6319	99	924	6494	11689	54
					2		3967	4429	1604	629	471	6510	102	684	6690	12042	
					3		4725	5275		749	561	7754	121	815	7968	14343	
					4		4528	5472							8224	14804	
					5	367	4352	5271							7923	14261	
"	"	603 A2[19]1	1	3	1	330	3736	4052	1882	390	488	6144	108	988	6248	11247	54
					2		3854	4190	1946	403	467	6354	112	718	6461	11631	
					3		4798	5202		500	580	7889	139	892	8022	14441	
					4		4621	5379							8272	14889	
					5	426	4423	5151							7919	14255	
"	"	603 B1[19]4	3	1	1	276	3663	4167	1894	630	465	6014	93	904	6197	11155	54
					2		3767	4285	1948	648	447	6184	96	677	6373	11472	
					3		4678	5322		805	555	7680	119	841	7915	14247	
					4		4446	5554							8214	14786	
					5	353	4284	5363							7916	14248	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
									NOBLE COUNTY (CON.)								
ENOCH	MEIGS CREEK	603 82[19]	4	3	1	2.85	34.86	37.98	24.31	3.81	4.57	57.00	1.00	9.31	5821	10478	54
					2		35.88	39.10	25.02	3.92	4.38	58.67	1.03	6.98	5992	10785	
					3		47.85	52.15		5.23	5.84	78.25	1.37	9.31	7991	14384	
					4		45.62	54.38							8306	14951	
					5	3.98	43.81	52.21							7977	14358	
JACKSON	"	397	1	2	1	4.52	42.16	41.26	12.06	4.54	5.12	66.08	.88	11.32	6722	12099	27
					2		44.16	43.21	12.63	4.75	4.84	69.21	.92	7.65	7040	12672	
					3		50.54	49.46		5.44	5.54	79.21	1.05	8.76	8058	14504	
					4		49.25	50.75							8249	14848	
					5	5.35	46.52	48.03							7807	14053	
"	"	601 81	3	3	1	1.96	41.60	44.53	11.91	5.32					6916	12449	53
					2		42.43	45.42	12.15	5.43					7054	12698	
					3		48.30	51.70		6.18					8030	14454	
					4		46.83	53.17							8229	14813	
					5	2.33	45.74	51.93							8037	14467	
"	"	601 82	3	3	1	1.92	42.47	44.98	10.63	5.79					7037	12668	53
					2		43.30	45.86	10.84	5.90					7175	12916	
					3		48.56	51.44		6.62					8047	14486	
					4		47.12	52.88							8244	14840	
					5	2.25	46.06	51.69							8059	14506	
"	"	601 83	3	3	1	2.16	36.25	39.68	21.91	3.83					6051	10892	53
					2		37.05	40.56	22.39	3.91					6185	11132	
					3		47.74	52.26		5.04					7969	14343	
					4		45.74	54.26							8248	14846	
					5	2.91	44.41	52.68							8008	14415	
"	"	601 84	3	3	1	2.35	40.90	50.06	6.69	2.62					7382	13288	53
					2		41.88	51.27	6.85	2.68					7560	13608	
					3		44.96	55.04		2.77					8116	14609	
					4		44.20	55.80							8212	14782	
					5	2.57	43.07	54.36							8001	14402	
"	"	601 89	3	3	1	2.24	40.44	45.32	12.00	4.39	5.13	67.76	1.05	9.67	6890	12402	53
					2		41.37	46.36	12.27	4.49	4.99	69.31	1.08	7.86	7048	12686	
					3		47.16	52.84		5.12	5.69	79.00	1.23	8.96	8034	14460	
					4		45.79	54.21							8214	14786	
					5	2.65	44.57	52.78							7998	14396	
"	"	601 C1	3	3	1	2.18	41.95	42.57	13.30	5.63					6782	12209	53
					2		42.88	43.52	13.60	5.76					6933	12481	
					3		49.63	50.37		6.67					8024	14446	
					4		48.07	51.93							8246	14843	
					5	2.54	46.81	50.55							8028	14451	
"	"	601 C2	3	3	1	2.31	36.62	41.79	19.28	4.62					6243	11238	53
					2		37.49	42.78	19.73	4.73					6391	11504	
					3		46.70	53.30		5.89					7962	14332	
					4		44.71	55.29							8227	14808	
					5	3.01	43.36	53.63							7979	14363	
"	"	601 C3	3	3	1	2.34	39.02	50.71	7.93	3.77					7247	13046	53
					2		39.95	51.93	8.12	3.86					7421	13359	
					3		43.48	56.52		4.20					8077	14540	
					4		42.37	57.63							8208	14775	
					5	2.62	41.27	56.11							7993	14388	
"	"	601 C4	3	3	1	2.48	35.97	46.95	14.60	3.74					6569	11825	53
					2		36.88	48.15	14.97	3.84					6736	12126	
					3		43.37	56.63		4.52					7922	14261	
					4		41.78	58.22							8113	14603	
					5	3.02	40.53	56.45							7868	14162	
"	"	601 C9	3	3	1	2.24	38.51	44.71	14.54	4.59	4.91	65.46	.94	9.56	6624	11923	53
					2		39.39	45.74	14.87	4.70	4.77	66.96	.96	7.74	6776	12196	
					3		46.27	53.73		5.52	5.60	78.66	1.13	9.09	7960	14326	
					4		44.64	55.36							8168	14702	
					5	2.74	43.43	53.83							7944	14300	
"	"	601 D1	3	3	1	2.18	41.38	44.35	12.09	5.60					6861	12350	53
					2		42.30	45.34	12.36	5.72					7014	12625	
					3		48.27	51.73		6.53					8003	14406	
					4		46.73	53.27							8209	14776	
					5	2.60	45.52	51.88							7996	14393	
"	"	601 D2	3	3	1	2.14	39.96	44.27	13.63	5.65					6678	12021	53
					2		40.83	45.24	13.93	5.77					6824	12284	
					3		47.44	52.56		6.70					7928	14272	
					4		45.74	54.26							8149	14668	
					5	2.60	44.56	52.84							7936	14285	
"	"	601 D3	3	3	1	2.12	37.73	42.40	17.75	4.89					6409	11536	53
					2		38.55	43.32	18.13	5.00					6548	11786	
					3		47.09	52.91		6.11					7998	14396	
					4		45.19	54.81							8252	14853	
					5	2.71	43.97	53.32							8028	14450	
"	"	601 D4	3	3	1	2.44	40.05	45.68	11.83	2.95					6969	12545	53
					2		41.05	46.82	12.13	3.02					7143	12859	
					3		46.72	53.28		3.44					8129	14634	
					4		45.60	54.40							8283	14909	
					5	2.85	44.30	52.85							8046	14483	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
NOBLE COUNTY (CON.)																	
JACKSON	MEIGS CREEK	601 D9	3	3	1	2.10	39.46	44.02	14.42	4.85	4.97	65.70	.94	9.12	6659	11986	53
					2		40.31	44.96	14.73	4.95	4.84	67.11	.96	7.41	6802	12243	
					3		47.27	52.73		5.80	5.68	78.70	1.13	8.69	7977	14358	
					4		45.66	54.34							8190	14742	
					5	2.57	44.48	52.95							7980	14364	
JEFFERSON	"	584 A	1	1	1	.79	36.0	43.1	13.0	5.1	5.3	62.9	.9	12.8	6428	11570	52
					2		39.1	46.8	14.1	5.5	4.8	68.3	1.0	6.3	6983	12570	
					3		45.5	54.4		6.4	5.5	79.5	1.2	7.4	8129	14620	
					4		43.8	56.2							8356	15040	
					5	.96	39.6	50.9							7559	13607	
"	"	584 B1	1	1	1	.32	37.6	44.7	14.6	4.8	5.0	65.8	1.1	8.8	6661	11990	52
					2		38.8	46.3	14.9	5.0	4.8	67.9	1.1	6.3	6878	12380	
					3		45.6	54.4		5.9	5.7	79.8	1.3	7.3	8082	14550	
					4		43.9	56.1							8303	14946	
					5	.39	42.3	53.8							7990	14382	
"	"	584 B2	1	1	1	.34	35.3	41.3	12.0	4.0	4.8	60.8	1.1	9.3	6144	11060	52
					2		36.5	42.8	12.7	4.1	4.6	62.9	1.1	6.6	6361	11450	
					3		46.0	54.0		5.2	5.8	79.3	1.4	8.3	8021	14440	
					4		44.0	56.0							8287	14916	
					5	.45	42.1	53.4							7918	14252	
MARION	"	168	1	1	1	3.57	41.53	44.37	10.53	4.87	5.25	68.15	1.11	10.09	6947	12505	14
					2		43.07	46.01	10.92	5.05	5.03	70.67	1.15	7.18	7204	12967	
					3		48.35	51.65		5.67	5.65	79.33	1.29	8.06	8087	14557	
					4		47.03	52.97							8268	14883	
					5	4.15	45.08	50.77							7926	14266	
"	"	396	1	2	1	3.12	37.36	46.67	12.85	5.60	5.09	65.61	.92	9.93	6739	12130	7
					2		38.56	48.18	13.26	5.78	4.90	67.72	.95	7.39	6956	12521	
					3		44.45	55.55		6.66	5.65	78.07	1.10	8.52	8019	14435	
					4		42.65	57.35							8237	14827	
					5	3.76	41.05	55.19							7928	14270	
NOBLE	ANDERSON	493	1	2	1	3.29	40.84	46.67	9.20	2.67	3.84	69.90	.82	13.47	7060	12708	29
					2		42.23	48.26	9.51	2.76	3.59	72.29	.95	10.90	7301	13142	
					3		46.67	53.33		3.05	3.97	79.88	1.05	12.05	8068	14523	
					4		45.76	54.24							8190	14742	
					5	3.71	44.06	52.23							7885	14193	
"	UPPER FREEPORT	166 A	1	1	1	4.88	37.76	48.93	8.43	2.95					7073	12731	13
					2		39.70	51.44	8.86	3.10					7436	13385	
					3		43.56	56.44		3.40					8159	14086	
					4		42.55	57.45							8284	14911	
					5	5.47	40.22	54.31							7831	14096	
"	"	166 B	1	1	1	5.13	37.17	49.59	8.11	2.99					7053	12695	13
					2		39.18	52.27	8.55	3.15					7435	13383	
					3		42.84	57.16		3.44					8130	14634	
					4		41.82	58.18							8253	14855	
					5	5.73	39.42	54.85							7779	14002	
"	"	166 K	1	1	1	5.15	37.34	49.00	8.51	2.94	5.42	70.51	1.50	11.12	7074	12733	13
					2		39.37	51.66	8.97	3.10	5.12	74.34	1.58	6.89	7459	13426	
					3		43.25	56.75		3.41	5.62	81.66	1.74	7.57	8194	14749	
					4		42.22	57.78							8321	14977	
					5	5.77	39.79	54.44							7839	14111	
"	"	319	1	2	1	4.77	37.06	50.33	7.84	2.43	5.26	71.57	1.41	11.49	7028	12651	25
					2		38.92	52.85	8.23	2.55	4.97	75.15	1.48	7.62	7380	13285	
					3		42.41	57.59		2.78	5.42	81.89	1.61	8.30	8042	14476	
					4		41.51	58.49							8148	14667	
					5	5.29	39.31	55.40							7717	13891	
OLIVE	MEIGS CREEK	395	1	2	1	4.36	41.06	41.26	13.32	4.73					6574	11833	27
					2		42.93	43.14	13.93	4.95					6874	12372	
					3		49.88	50.12		5.75					7987	14374	
					4		48.44	51.56							8191	14744	
					5	5.25	45.90	48.85							7761	13970	
SENECA	"	176	1	1	1	4.53	39.56	45.59	10.32	4.12	5.27	68.00	1.17	11.12	6846	12323	14
					2		41.44	47.75	10.81	4.32	5.00	71.22	1.23	7.42	7171	12908	
					3		46.46	53.54		4.84	5.61	79.85	1.38	8.32	8040	14472	
					4		45.20	54.80							8204	14767	
					5	5.23	42.83	51.94							7774	13994	
SHARON	"	498	1	2	1	2.00	42.75	43.20	12.05	5.03					6935	12483	29
					2		43.62	44.08	12.30	5.13					7075	12735	
					3		49.74	50.26		5.85					8067	14521	
					4		48.38	51.62							8263	14874	
					5	2.37	47.23	50.40							8068	14523	
STOCK	"	288	1	2	1	2.55	38.40	47.64	11.41	5.79	5.11	67.50	.92	9.27	6952	12514	7
					2		39.40	48.89	11.71	5.94	4.96	69.26	.94	7.19	7134	12841	
					3		44.63	55.37		6.73	5.62	78.45	1.06	8.14	8080	14544	
					4		42.92	57.08							8288	14918	
					5	3.02	41.62	55.36							8038	14468	
"	"	394	1	2	1	4.08	43.49	41.56	10.87	5.39	5.19	66.70	1.02	10.83	6831	12296	27
					2		45.34	43.33	11.33	5.62	4.95	69.54	1.06	7.50	7122	12820	
					3		51.13	48.87		6.34	5.58	78.42	1.20	8.46	8032	14458	
					4		49.82	50.18							8227	14809	
					5	4.78	47.44	47.78							7833	14100	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
									PERRY COUNTY								
BEARFIELD	MIDDLE KITTANNING	458	1	2	1	590	3658	4742	1010	496	526	6543	122	1303	6686	12035	2
					2		3887	5040	1073	527	490	6953	129	828	7105	12789	
					3		4354	5646		590	549	7788	145	928	7959	14326	
					4		4199	5801							8137	14647	
					5	683	3912	5405							7582	13648	
CLAYTON	"	457	1	2	1	672	3830	4834	664	243	561	6845	129	1558	6903	12425	2
					2		4107	5182	711	260	522	7338	139	1030	7400	13320	
					3		4421	5579		280	562	7899	150	1109	7966	14340	
					4		4342	5658							8062	14512	
					5	734	4022	5244							7471	13448	
"	"	553 A	1	3	1	529	3993	3883	1595	172					6327	11389	51
					2		4216	4100	1684	182					6680	12025	
					3		5070	4930		219					8033	14460	
					4		4960	5040							8204	14768	
					5	646	4640	4714							7674	13813	
"	"	553 B	1	3	1	512	3456	3913	2109	124					5821	10478	51
					2		3653	4124	2223	131					6135	11043	
					3		4697	5303		168					7889	14200	
					4		4547	5453							8102	14584	
					5	669	4243	5088							7560	13608	
"	"	553 C	1	3	1	575	3354	3611	2460	317					5464	9834	51
					2		3559	3831	2610	336					5797	10434	
					3		4816	5184		455					7844	14119	
					4		4596	5404							8152	14673	
					5	802	4227	4971							7498	13497	
"	"	553 D	1	3	1	543	3452	3896	2109	179					5811	10461	51
					2		3650	4120	2230	189					6145	11061	
					3		4698	5302		243					7909	14236	
					4		4535	5465							8137	14646	
					5	712	4213	5075							7558	13604	
"	"	553 K	1	3	1	540	3556	3826	2068	198					5856	10541	51
					2		3770	4044	2186	209					6190	11142	
					3		4825	5175		267					7922	14259	
					4		4667	5333							8149	14669	
					5	705	4337	4958							7576	13636	
"	"	602 A1	1	3	1	320	4385	4574	721	465					7067	12722	53
					2		4530	4725	745	480					7301	13143	
					3		4895	5105		519					7889	14201	
					4		4790	5210							8026	14447	
					5	357	4619	5024							7739	13931	
"	"	602 A2	1	3	1	270	4119	5104	507	180					7280	13105	53
					2		4233	5246	521	185					7482	13469	
					3		4466	5534		195					7893	14209	
					4		4410	5590							7961	14329	
					5	289	4283	5428							7731	13915	
"	"	602 A3	1	3	1	280	3717	4047	1956	155					6072	10931	53
					2		3824	4164	2012	159					6247	11246	
					3		4787	5213		199					7820	14079	
					4		4651	5349							8016	14428	
					5	359	4484	5157							7728	13911	
"	"	602 A9	1	3	1	320	4018	4577	1085	268					6761	12170	53
					2		4151	4728	1121	277					6985	12572	
					3		4675	5325		312					7867	14159	
					4		4574	5426							7998	14396	
					5	369	4405	5226							7703	13865	
"	"	602 B1	1	3	1	372	4056	3661	1911	1182					5909	10636	53
					2		4213	3802	1985	1228					6137	11047	
					3		5256	4744		1532					7657	13783	
					4		4962	5038							8072	14529	
					5	511	4708	4781							7659	13787	
"	"	602 B2	1	3	1	464	4004	4136	1396	379					6355	11439	53
					2		4199	4337	1464	397					6664	11996	
					3		4919	5081		465					7807	14053	
					4		4784	5216							7992	14386	
					5	560	4516	4924							7544	13580	
"	"	602 B3	1	3	1	304	3091	3093	3512	185					4721	8499	53
					2		3188	3190	3622	191					4869	8765	
					3		4998	5002							7634	13743	
					4		4716	5284							8050	14490	
					5	498	4481	5021							7649	13769	
"	"	602 B9[20]1	1	3	1	395	3871	3744	1990	707					5874	10575	53
					2		4030	3898	2072	737					6116	11010	
					3		5083	4917		928					7714	13887	
					4		4852	5148							8037	14467	
					5	529	4596	4875							7610	13698	
HARRISON	"	454	1	2	1	640	3800	4802	768	272	549	6806	166	1469	6867	12361	2
					2		4060	5130	810	290	511	7271	135	983	7337	13206	
					3		4418	5582		316	566	7911	147	1070	7984	14370	
					4		4327	5673							8093	14568	
					5	709	4019	5272							7520	13536	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
PERRY COUNTY (CON.)																	
HARRISON	MIDDLE KITTANNING	455	1	2	1	570	3883	4702	845	338	537	6777	118	1385	6851	12332	2
					2		4118	4986	896	358	503	7187	125	931	7265	13077	
					3		4523	5477		393	553	7894	137	1023	7980	14364	
					4		4418	5582							8110	14598	
					5	640	4135	5225							7591	13664	
"	"	456	1	2	1	721	3760	4993	526	234	560	6977	126	1577	7008	12614	2
					2		4062	5381	567	252	517	7519	136	1009	7553	13595	
					3		4296	5704		267	548	7971	144	1070	8007	14412	
					4		4223	5777							8091	14563	
					5	775	3896	5329							7463	13433	
MONROE	UPPER FREEPORT	490	1	2	1	542	4174	4679	605	270					6971	12547	29
					2		4413	4948	639	285					7368	13263	
					3		4714	5286		304					7871	14168	
					4		4641	5359							7963	14334	
					5	589	4368	5043							7497	13494	
"	MIDDLE KITTANNING	450	1	2	1	679	3545	5185	591	100	549	7030	130	1600	6983	12569	2
					2		3804	5562	634	107	508	7542	139	1070	7492	13485	
					3		4061	5939		114	542	8054	148	1142	7999	14398	
					4		4009	5991							8061	14510	
					5	730	3715	5555							7473	13452	
"	"	487	1	2	1	650	4062	4520	758	260					6871	12367	30
					2		4349	4839	812	278					7356	13241	
					3		4733	5267		303					8006	14411	
					4		4652	5348							8114	14606	
					5	730	4312	4958							7522	13539	
PIKE	"	123 A	1	1	1	887	3932	4781	400	174							5
					2		4315	5246	439	192							
					3		4513	5487		201							
					4		4462	5538									
					5	936	4044	5020									
"	"	123 B	1	1	1	392	3858	4665	585	300					6849	12328	5
					2		4236	5122	642	329					7520	13536	
					3		4527	5473		352					8036	14465	
					4		4441	5559							8141	14653	
					5	969	4011	5020							7351	13232	
"	"	452	1	2	1	525	3885	4604	986	343	538	6605	118	1410	6773	12191	2
					2		4100	4859	1041	362	507	6971	124	995	7148	12866	
					3		4576	5424		404	566	7781	138	1111	7979	14361	
					4		4462	5538							8122	14620	
					5	600	4195	5205							7634	13742	
"	"	453 A	1	2	1	700	3712	4893	695	233	558	6829	126	1559	6880	12384	2
					2		3991	5262	747	251	516	7343	135	1008	7398	13316	
					3		4313	5687		271	558	7936	146	1089	7995	14391	
					4		4231	5769							8093	14567	
					5	757	3907	5336							7472	13449	
"	"	453 B	1	1	1	48	437	467	48	25	57	716	14	140	7239	13030	28
					2		459	491	50	26	55	752	14	103	7600	13680	
					3		483	517		28	58	792	15	107	8006	14410	
					4		478	522							8089	14560	
					5	51	453	496							7672	13810	
"	LOWER KITTANNING	302	1	2	1	674	3705	4909	712	258	547	6834	124	1525	6885	12393	2
					2		3973	5264	763	277	506	7328	133	993	7382	13288	
					3		4301	5699		300	548	7933	144	1075	7992	14386	
					4		4212	5788							8096	14572	
					5	742	3900	5358							7496	13493	
"	"	303	1	2	1	685	3522	4777	1016	472	526	6478	122	1386	6591	11864	2
					2		3781	5128	1091	507	483	6954	131	834	7075	12735	
					3		4244	5756		569	542	7806	147	936	7941	14295	
					4		4086	5914							8117	14610	
					5	793	3762	5445							7474	13453	
SALT CREEK	MIDDLE KITTANNING	124 A	1	1	1	1078	3486	4823	613	111					6663	11993	5
					2		3907	5406	687	124					7468	13442	
					3		4195	5805		133					8019	14434	
					4		4138	5862							8089	14560	
					5	1162	3657	5181							7149	12868	
"	"	124 B	1	1	1	979	3574	4846	601	143							5
					2		3962	5372	656	159							
					3		4245	5755		170							
					4		4183	5817									
					5	1056	3741	5203									
"	"	451	1	2	1	776	3350	5127	747	145	546	6830	118	1614	6772	12190	2
					2		3632	5558	810	157	499	7404	128	1002	7342	13216	
					3		3952	6048		171	543	8057	139	1090	7989	14381	
					4		3877	6123							8074	14534	
					5	851	3547	5602							7387	13296	

Township	Seam	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								PORTAGE COUNTY									
DEERFIELD	SHARON	115 A	1	4	1	7.4	36.9	49.4	6.3	1.5	5.6	70.2	1.3	15.1	7000	12600	43
					2		39.9	53.3	6.8	1.7	5.1	75.8	1.4	9.2	7561	13610	
					3		42.8	57.2		1.8	5.5	81.4	1.5	9.8	8111	14600	
					4		42.1	57.9							8189	14740	
					5	8.0	38.8	53.2							7533	13560	
"	"	115 B	1	4	1	8.9	33.9	49.8	7.4	1.6	5.5	68.2	1.4	15.9	6778	12200	43
					2		37.3	54.6	8.1	1.7	5.0	74.9	1.5	8.8	7439	13390	
					3		40.6	59.4		1.9	5.4	81.5	1.6	9.6	8094	14570	
					4		39.7	60.3							8189	14740	
					5	9.3	35.8	54.4							7389	13300	
PALMYRA	"	220	1	2	1	15.19	34.49	47.53	2.79	.62	6.23	67.33	.96	22.07	6687	12036	26
					2		40.67	56.04	3.89	.73	5.35	79.39	1.13	10.11	7884	14192	
					3		42.05	57.95		.75	5.53	82.10	1.17	10.45	8152	14675	
					4		41.77	58.83							8188	14738	
					5	15.72	35.20	49.08							6901	12422	
								SCIOTO COUNTY									
BLOOM	CLARION	360	1	2	1	6.80	37.92	45.94	9.34	3.45	5.33	65.30	1.23	15.35	6577	11839	1
					2		40.69	49.29	10.02	3.70	4.91	70.06	1.32	9.99	7057	12703	
					3		45.22	54.78		4.11	5.46	77.86	1.47	11.10	7829	14118	
					4		44.07	55.93							7981	14365	
					5	7.73	40.66	51.61							7364	13255	
"	UPPER MERCER	283	1	2	1	10.22	40.82	45.59	3.27	.91	5.39	69.28	1.53	19.62	6894	12409	28
					2		45.46	50.90	3.64	1.01	4.73	77.16	1.70	11.76	7679	13822	
					3		47.18	52.82		1.05	4.91	80.08	1.76	12.20	7969	14344	
					4		46.87	53.13							8010	14418	
					5	10.55	41.88	47.47							7157	12883	
"	BEAR RUN	383	1	2	1	10.44	36.20	44.84	8.52	1.03					6352	11434	28
					2		40.42	50.07	9.51	1.15					7092	12767	
					3		44.67	55.33		1.27					7837	14109	
					4		44.00	56.00							7925	14265	
					5	11.57	38.91	49.52							7008	12615	
VERNON	BROOKVILLE	377	1	2	1	9.03	37.94	44.17	8.86	3.35					6417	11551	28
					2		41.71	48.55	9.74	3.68					7054	12697	
					3		46.21	53.79		4.08					7815	14067	
					4		45.12	54.88							7949	14308	
					5	10.19	40.62	49.29							7139	12850	
								STARK COUNTY									
CANTON	BROOKVILLE	376	1	2	1	5.18	39.90	43.62	11.30	3.62	5.21	65.29	1.19	13.39	6593	11867	26
					2		42.09	46.01	11.90	3.82	4.90	68.88	1.26	9.24	6953	12515	
					3		47.78	52.22		4.34	5.56	78.18	1.43	10.49	7892	14205	
					4		46.57	53.43							8051	14491	
					5	6.04	43.76	50.20							7566	13619	
LAWRENCE	SHARON	219	1	2	1	6.56	40.09	49.72	3.63	.87					7336	13205	26
					2		42.90	53.21	3.89	.93					7850	14130	
					3		44.64	55.36		.97					8168	14702	
					4		44.30	55.70							8211	14780	
					5	6.86	41.27	51.87							7648	13767	
LEXINGTON	MIDDLE KITTANNING	449	1	2	1	5.99	39.05	50.14	4.82	3.61	5.56	71.82	1.33	12.86	7314	13165	7
					2		41.54	53.33	5.13	3.84	5.21	76.39	1.41	8.02	7780	14004	
					3		43.79	56.21		4.05	5.49	80.52	1.49	8.45	8201	14761	
					4		42.87	57.13							8309	14957	
					5	6.45	40.11	53.44							7773	13991	
NIMISHILLEN	"	448	1	2	1	5.65	38.51	45.76	10.08	4.13	5.29	66.92	1.19	12.39	6868	12362	7
					2		40.82	48.50	10.68	4.38	4.94	70.93	1.26	7.81	7279	13102	
					3		45.70	54.30		4.90	5.53	79.42	1.41	8.74	8149	14669	
					4		44.41	55.59							8317	14970	
					5	6.51	41.51	51.98							7776	13997	
SANDY	"	301 B^{21}	1	2	1	6.49	40.26	46.64	6.51	1.93					6942	12495	26
					2		43.05	49.88	7.07	2.07					7423	13362	
					3		46.33	53.67		2.23					7988	14379	
					4		45.66	54.34							8074	14534	
					5	7.07	42.44	50.49							7503	13506	
"	"	446	1	2	1	6.56	36.24	48.88	8.22	2.66	5.37	68.94	1.20	13.61	6977	12559	7
					2		38.82	52.57	8.81	2.85	4.96	73.86	1.28	8.24	7475	13455	
					3		42.57	57.43		3.13	5.44	80.99	1.40	9.04	8197	14755	
					4		41.58	58.42							8318	14972	
					5	7.43	38.50	54.07							7699	13859	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
STARK COUNTY (CON.)																	
SANDY	LOWER KITTANNING	301 A^{21}	1	2	1	381	4434	4580	605	344					7268	13083	26
					2		4609	4751	630	358					7556	13601	
					3		4919	5081		382					8064	14515	
					4		4840	5160							8174	14713	
					5	416	4639	4945							7833	14099	
TUSCARAWAS	MIDDLE MERCER	285	1	2	1	354	4038	4235	1373	245	517	6382	87	1396	6401	11521	26
					2		4186	4391	1423	254	494	6617	90	1122	6636	11944	
					3		4880	5120		296	576	7715	105	1308	7737	13926	
					4		4770	5230							7887	14197	
					5	422	4570	5008							7554	13598	
"	SHARON	218	1	2	1	529	4226	4857	378	76	562	7255	108	1621	7152	12874	26
					2		4462	5138	400	79	531	7660	114	1216	7551	13593	
					3		4648	5352		82	553	7979	119	1267	7866	14159	
					4		4618	5382							7906	14230	
					5	554	4362	5084							7467	13441	
TUSCARAWAS COUNTY																	
AUBURN	MIDDLE KITTANNING	444	1	2	1	430	4007	4800	753	397	541	6939	128	1232	7001	12602	2
					2		4187	5016	797	415	515	7251	134	888	7316	13169	
					3		4550	5450		451	560	7878	146	965	7950	14309	
					4		4441	5559							8081	14546	
					5	480	4228	5292							7693	13847	
BUCKS	"	443	1	2	1	519	4079	4815	587	355	559	7012	136	1351	7122	12820	2
					2		4302	5079	619	374	529	7395	143	940	7512	13522	
					3		4586	5414		399	564	7883	152	1002	8008	14414	
					4		4496	5504							8118	14612	
					5	556	4242	5192							7659	13786	
CLAY	"	442	1	2	1	341	3973	4748	938	488	523	6877	130	1044	6971	12548	2
					2		4114	4915	971	505	502	7120	135	767	7217	12991	
					3		4556	5444		559	556	7886	150	849	7993	14388	
					4		4421	5579							8159	14687	
					5	391	4247	5362							7840	14112	
DOVER	"	440	1	2	1	494	3620	4936	950	419	514	6754	130	1233	6856	12341	2
					2		3808	5193	999	441	483	7107	137	833	7214	12985	
					3		4231	5769		490	537	7896	152	925	8015	14426	
					4		4092	5908							8171	14708	
					5	565	3862	5573							7708	13875	
"	"	441	1	2	1	352	4025	5022	601	317	541	7213	128	1200	7297	13135	2
					2		4172	5205	623	329	520	7476	133	919	7563	13613	
					3		4449	5551		351	555	7972	142	980	8065	14517	
					4		4353	5637							8169	14704	
					5	384	4195	5421							7856	14141	
FAIRFIELD	"	438	1	2	1	715	3834	4995	456	262	564	7129	123	1466	7194	12949	7
					2		4129	5380	491	282	522	7678	132	895	7748	13946	
					3		4342	5658		297	549	8074	139	941	8148	14666	
					4		4270	5730							8234	14821	
					5	764	3943	5293							7605	13689	
"	"	439	1	2	1	456	3925	4987	622	328	548	7080	128	1294	7097	12775	2
					2		4117	5231	652	344	521	7426	134	923	7444	13399	
					3		4404	5596		368	557	7945	143	987	7963	14334	
					4		4313	5687							8069	14525	
					5	509	4093	5398							7659	13786	
GOSHEN	"	437	1	2	1	351	4150	4720	769	456	545	7026	122	1082	7153	12875	2
					2		4311	4892	797	473	524	7282	126	798	7413	13343	
					3		4684	5316		514	569	7913	137	867	8055	14499	
					4		4570	5430							8201	14761	
					5	394	4390	5216							7878	14180	
JEFFERSON	"	436	1	2	1	472	4030	4951	547	405	553	7108	132	1255	7199	12958	2
					2		4230	5196	574	425	526	7460	138	877	7555	13599	
					3		4488	5512		451	558	7915	146	930	8015	14427	
					4		4389	5611							8131	14636	
					5	514	4163	5323							7714	13885	
LAWRENCE	"	445	1	2	1	459	3957	4658	906	470	530	6759	124	1211	6881	12386	2
					2		4153	4897	950	494	501	7092	130	833	7220	12996	
					3		4589	5411		546	554	7836	144	920	7978	14360	
					4		4458	5542							8139	14650	
					5	535	4219	5246							7703	13866	
MILL	UPPER FREEPORT	318	1	2	1	632	3766	4948	654	291	526	7078	143	1308	6985	12573	25
					2		4080	5282	698	311	487	7556	153	795	7456	13421	
					3		4322	5678		334	524	8123	164	855	8015	14428	
					4		4231	5769							8121	14617	
					5	692	3958	5370							7559	13606	
"	MIDDLE KITTANNING	435	1	2	1	378	3827	4953	842	383	526	7031	122	1096	7101	12782	2
					2		3977	5148	875	398	503	7307	127	790	7380	13284	
					3		4358	5642		436	561	8008	139	866	8088	14558	
					4		4241	5759							8227	14809	
					5	426	4061	5513							7877	14179	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
TUSCARAWAS COUNTY (CON.)																	
RUSH	UPPER FREEPORT	317	1	2	1	6.38	39.69	47.02	6.91	3.13	5.35	69.42	1.39	13.80	7005	12609	25
					2		42.39	50.22	7.39	3.34	4.96	74.15	1.48	8.68	7482	13468	
					3		45.77	54.23		3.61	5.36	80.06	1.60	9.37	8079	14543	
					4		44.87	55.13							8194	14749	
					5	7.03	41.71	51.26							7618	13712	
SALEM	MIDDLE KITTANNING	434	1	2	1	3.45	40.02	48.86	7.67	5.22	5.30	70.02	1.26	10.53	7135	12843	2
					2		41.45	50.61	7.94	5.41	5.09	72.52	1.30	7.74	7390	13302	
					3		45.02	54.98		5.88	5.53	78.77	1.41	8.41	8027	14449	
					4		43.70	56.30							8185	14733	
					5	3.88	42.01	54.11							7868	14162	
SANDY	"	433	1	2	1	4.92	38.13	49.91	7.04	2.91	5.40	70.45	1.28	12.92	7082	12748	2
					2		40.10	52.50	7.40	3.06	5.11	74.10	1.34	8.99	7448	13406	
					3		43.30	56.70		3.30	5.52	80.02	1.45	9.71	8043	14477	
					4		42.38	57.62							8152	14673	
					5	5.42	40.09	54.49							7711	13880	
"	LOWER KITTANNING	562 A	1	1	1	5.61	36.25	49.42	8.72	2.89							6
					2		38.40	52.36	9.24	3.06							
					3		42.31	57.69		3.37							
					4		41.25	58.75									
					5	6.30	38.55	55.05									
"	"	562 B	1	1	1	4.46	39.89	47.11	8.54	3.73					7136	12845	6
					2		41.75	49.31	8.94	3.90					7469	13444	
					3		45.85	54.15		4.28					8202	14764	
					4		44.76	55.24							8346	15022	
					5	5.03	42.50	52.47							7926	14267	
"	"	562 C	1	2	1	5.30	38.73	48.26	7.71	3.25	5.46	69.75	1.18	12.65	7168	12902	7
					2		40.90	50.96	8.14	3.43	5.14	73.66	1.25	8.38	7569	13624	
					3		44.52	55.48		3.73	5.60	80.19	1.36	9.12	8240	14831	
					4		43.52	56.48							8367	15061	
					5	5.90	40.95	53.15							7874	14173	
UNION	MIDDLE KITTANNING	114 A	1	1	1	5.4	40.2	47.8	6.6	2.5					7150	12870	31
					2		42.5	50.5	7.0	2.6					7558	13605	
					3		45.7	54.3		2.8					8127	14629	
					4		44.9	55.1							8222	14800	
					5	5.9	42.3	51.8							7739	13930	
"	"	114 B	1	1	1	4.7	41.1	47.4	6.8	2.9					7194	12950	31
					2		43.1	49.8	7.1	3.0					7549	13589	
					3		46.4	53.6		3.2					8127	14628	
					4		45.6	54.4							8239	14830	
					5	5.2	43.2	51.6							7811	14060	
"	"	114 K	1	1	1	5.1	40.6	47.6	6.7	2.7	5.6	71.8	1.3	11.9	7189	12940	31
					2		42.8	50.2	7.0	2.8	5.2	75.6	1.4	8.0	7572	13630	
					3		46.0	54.0		3.1	5.6	81.4	1.5	8.4	8150	14670	
					4		45.2	54.8							8256	14860	
					5	5.6	42.7	51.7							7794	14030	
"	"	432	1	2	1	3.81	38.71	51.47	6.01	3.24	5.41	72.30	1.36	11.68	7306	13151	2
					2		40.24	53.51	6.25	3.36	5.19	75.16	1.41	8.63	7595	13671	
					3		42.92	57.08		3.58	5.54	80.17	1.50	9.21	8101	14582	
					4		42.01	57.99							8207	14773	
					5	4.15	40.27	55.58							7867	14160	
WARWICK	"	431	1	2	1	4.10	41.64	49.05	5.21	3.25	5.57	72.45	1.42	12.10	7331	13196	2
					2		43.42	51.15	5.43	3.38	5.34	75.55	1.48	8.82	7644	13759	
					3		45.91	54.09		3.57	5.65	79.89	1.56	9.33	8083	14549	
					4		45.12	54.88							8182	14727	
					5	4.43	43.12	52.45							7821	14077	
YORK	"	430	1	2	1	3.18	43.56	46.33	6.93	4.12	5.50	71.13	1.28	11.04	7305	13149	2
					2		44.99	47.85	7.16	4.25	5.32	73.46	1.32	8.49	7545	13581	
					3		48.46	51.54		4.58	5.73	79.13	1.42	9.14	8127	14628	
					4		47.50	52.50							8259	14866	
					5	3.52	45.83	50.65							7967	14341	
VINTON COUNTY																	
BROWN	MIDDLE KITTANNING	426	1	2	1	8.58	40.53	40.36	10.53	4.07	5.55	62.97	1.33	15.55	6322	11379	25
					2		44.33	44.15	11.52	4.45	5.03	68.88	1.45	8.67	6915	12447	
					3		50.10	49.90		5.03	5.68	77.85	1.64	9.80	7815	14068	
					4		48.91	51.09							7979	14363	
					5	9.93	44.06	46.01							7187	12936	
"	"	427	1	2	1	7.83	41.71	44.73	5.73	2.66	5.74	68.68	1.53	15.66	6779	12202	25
					2		45.25	48.53	6.22	2.89	5.28	74.51	1.66	9.44	7355	13239	
					3		48.25	51.75		3.08	5.63	79.45	1.77	10.07	7843	14117	
					4		47.55	52.45							7934	14281	
					5	8.48	43.52	48.00							7261	13069	
"	"	428	1	2	1	9.89	38.14	43.68	8.39	3.25	5.59	64.56	1.47	16.74	6387	11496	25
					2		42.32	48.36	9.32	3.61	4.98	71.65	1.63	8.81	7088	12758	
					3		46.67	53.33		3.98	5.49	79.01	1.80	9.72	7816	14069	
					4		45.63	54.37							7945	14301	
					5	11.09	40.57	48.34							7063	12713	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B.t.u.	Year
		1	2	3	4												
VINTON COUNTY (CON.)																	
BROWN	MIDDLE KITTANNING	429	1	2	1	832	3946	4352	870	338	553	6542	138	1559	6502	11704	25
					2		4304	4747	949	369	503	7136	150	893	7092	12766	
					3		4755	5245		408	556	7883	166	987	7836	14105	
					4		4652	5348							7968	14343	
					5	938	4215	4847							7221	12998	
ELK	CLARION	359	1	2	1	495	3917	4656	932	353	540	6717	130	1328	6914	12445	1
					2		4121	4898	981	371	510	7067	137	934	7274	13093	
					3		4559	5431		411	565	7836	152	1036	8065	14517	
					4		4457	5543							8208	14774	
					5	563	4206	5231							7746	13943	
"	WINTERS	201	1	2	1	659	3556	4395	1380	134	498	6404	121	1463	6250	11251	22
					2		3811	4710	1479	144	454	6863	130	930	6698	12058	
					3		4472	5528		169	533	8054	153	1091	7861	14151	
					4		4367	5633							8000	14400	
					5	793	4021	5186							7366	13258	
"	BROOKVILLE	374	1	2	1	695	3849	4581	875	184	494	6803	123	1521	6684	12031	22
					2		4136	4924	940	198	448	7311	132	971	7183	12930	
					3		4565	5435		219	494	8069	146	1072	7928	14272	
					4		4486	5514							8031	14456	
					5	776	4139	5085							7408	13334	
"	"	375	1	2	1	608	3675	4477	1240	165	483	6645	116	1351	6460	11628	22
					2		3913	4767	1320	176	442	7075	123	864	6878	12381	
					3		4508	5492		203	509	8151	142	995	7924	14264	
					4		4408	5592							8056	14501	
					5	709	4096	5195							7484	13472	
"	QUAKERTOWN	171	3	4	1	666	3440	5400	494	128					7462	13431	27
					2		3686	5785	529	137					7994	14389	
					3		3892	6108		145					8441	15193	
					4		3837	6163							8506	15311	
					5	709	3564	5727							7903	14226	
"	"	224	1	2	1	1112	3690	4642	556	58	575	6734	152	1925	6623	11921	25
					2		4152	5222	626	65	509	7577	171	1052	7452	13413	
					3		4429	5571		69	543	8084	182	1122	7950	14309	
					4		4388	5612							8003	14406	
					5	1187	3867	4946							7053	12695	
HARRISON	"	223	1	2	1	1138	3879	4573	410	86	578	6735	152	2039	6553	11795	25
					2		4377	5160	463	97	510	7600	172	1158	7394	13310	
					3		4589	5411		102	535	7969	180	1214	7753	13956	
					4		4553	5447							7799	14038	
					5	1197	4008	4795							6866	12358	
MADISON	CLARION	357	1	2	1	502	3990	4611	897	332	548	6792	133	1298	6960	12528	1
					2		4201	4855	944	350	518	7151	140	897	7328	13190	
					3		4639	5361		386	572	7896	155	991	8092	14565	
					4		4535	5465							8228	14810	
					5	557	4278	5155							7762	13971	
"	"	358	1	2	1	480	4056	4221	1243	351	496	6556	121	1233	6567	11821	22
					2		4260	4434	1306	369	465	6887	127	846	6898	12417	
					3		4900	5100		424	535	7922	146	973	7934	14282	
					4		4779	5221							8103	14586	
					5	567	4508	4925							7643	13758	
"	WINTERS	200	1	2	1	606	3874	4638	882	181	512	6854	125	1446	6750	12151	22
					2		4124	4937	939	192	474	7296	133	966	7185	12935	
					3		4551	5449		212	523	8052	147	1066	7930	14275	
					4		4473	5527							8032	14458	
					5	677	4170	5153							7488	13479	
"	BROOKVILLE	373	1	2	1	437	3799	4404	1360	201	485	6601	121	1232	6474	11654	22
					2		3973	4605	1422	210	456	6903	127	882	6771	12187	
					3		4632	5368		245	532	8047	148	1028	7893	14207	
					4		4522	5478							8040	14472	
					5	519	4287	5194							7622	13720	
SWAN	CLARION	356	1	2	1	490	3916	4579	1015	425	540	6626	123	1271	6845	12321	2
					2		4118	4815	1057	447	511	6967	129	879	7198	12956	
					3		4610	5390		500	572	7800	144	984	8058	14504	
					4		4480	5520							8223	14802	
					5	565	4227	5208							7759	13966	
VINTON	"	354	1	2	1	502	4051	4652	815	287	549	6852	128	1369	6961	12530	99
					2		4244	4898	858	302	519	7214	135	972	7329	13192	
					3		4642	5358		330	568	7891	148	1063	8017	14430	
					4		4552	5448							8134	14641	
					5	560	4297	5143							7678	13821	
"	"	355	1	2	1	461	4135	4294	1110	528	536	6491	130	1205	6760	12168	99
					2		4335	4501	1164	554	508	6805	136	833	7087	12756	
					3		4906	5094		627	575	7701	154	943	8021	14436	
					4		4764	5236							8216	14789	
					5	542	4506	4952							7771	13987	
WILKESVILLE	"	119 A	1	1	1	679	4001	4554	766	334					6952	12514	5
					2		4292	4886	822	358					7458	13424	
					3		4676	5324		390					8126	14626	
					4		4580	5420							8253	14856	
					5	755	4235	5010							7631	13736	

Township	Seam	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
VINTON COUNTY (CON.)																	
WILKESVILLE	CLARION	119 B	1	1	1	7.38	41.60	44.86	6.16	2.77							5
					2		44.92	48.43	6.65	2.99							
					3		48.12	51.88		3.20							
					4		47.37	52.63									
					5	8.04	43.56	48.40									
"	"	352	1	2	1	4.52	40.10	46.53	8.85	4.23	5.44	67.17	1.28	13.03	6904	12427	99
					2		42.00	48.73	9.27	4.43	5.17	70.35	1.34	9.44	7231	13015	
					3		46.29	53.71		4.88	5.70	77.54	1.48	10.40	7970	14345	
					4		45.10	54.90							8118	14612	
					5	5.13	42.78	52.09							7702	13863	
"	"	353	1	2	1	4.72	39.88	44.19	11.21	4.16	5.36	65.04	1.28	12.95	6744	12139	99
					2		41.86	46.38	11.76	4.37	5.08	68.26	1.34	9.19	7078	12740	
					3		47.44	52.56		4.95	5.76	77.36	1.52	10.41	8021	14438	
					4		46.14	53.86							8194	14749	
					5	5.51	43.60	50.89							7743	13937	
WASHINGTON COUNTY																	
ADAMS	MEIGS CREEK	287	1	2	1	2.95	37.47	46.69	12.89	5.55	5.05	65.88	.92	9.71	6803	12245	4
					2		38.61	48.11	13.28	5.72	4.86	67.88	.95	7.31	7010	12617	
					3		44.52	55.48		6.60	5.60	78.27	1.10	8.43	8083	14549	
					4		42.73	57.27							8303	14945	
					5	3.55	41.22	55.23							8008	14414	
"	"	496	1	2	1	2.72	41.16	44.57	11.55	4.48	6.83	67.07	1.04	9.03	6850	12330	29
					2		42.31	45.82	11.87	4.61	6.71	68.95	1.07	6.79	7042	12675	
					3		48.01	51.99		5.23	7.61	78.25	1.21	7.70	7990	14382	
					4		46.68	53.32							8168	14702	
					5	3.20	45.19	51.61							7907	14232	
AURELIUS	"	286	1	2	1	3.40	37.95	49.07	9.58	5.03	5.31	68.33	.90	10.85	7083	12749	7
					2		39.28	50.80	9.92	5.21	5.10	70.73	.93	8.11	7332	13198	
					3		43.61	56.39		5.78	5.66	78.53	1.03	9.00	8139	14651	
					4		42.12	57.88							8317	14970	
					5	3.91	40.48	55.61							7991	14384	
LUDLOW	PITTSBURGH	502	2	1	1	2.2	38.1	45.9	1.38	.57	.49	6.62	.10	.84	6744	12140	48
					2		38.9	47.0	1.41	.58	.47	6.77	.10	.67	6894	12410	
					3		45.3	54.7		.68	.55	7.88	.12	.77	8028	14450	
					4		43.5	56.5							8253	14856	
					5	2.7	42.3	55.0							8036	14464	
"	"	503	2	1	1	1.00	31.6	44.5	1.40	.19	.49	.577	.10	2.05	5472	9850	48
					2		35.0	49.4	1.56	.21	.42	6.41	.11	1.29	6078	10940	
					3		41.5	58.5		.25	.50	7.59	.13	1.53	7201	12950	
					4		40.1	59.9							7341	13214	
					5	1.19	35.3	52.8							6464	11636	
SALEM	"	494	1	2	1	2.19	41.06	46.00	10.75	5.19	4.91	68.37	.70	10.08	6972	12550	29
					2		41.98	47.03	10.99	5.30	4.77	69.91	.71	8.32	7128	12831	
					3		47.16	52.84		5.95	5.36	78.54	.80	9.35	8008	14415	
					4		45.74	54.26							8192	14746	
					5	2.66	44.57	52.37							7983	14369	
WAYNE COUNTY																	
FRANKLIN	BROOKVILLE	372	1	2	1	6.81	42.64	40.54	10.01	3.28	5.55	64.53	.76	15.87	6548	11787	99
					2		45.76	43.50	10.74	3.52	5.14	69.24	.81	10.55	7027	12649	
					3		51.27	48.73		3.94	5.76	77.57	.91	11.82	7873	14171	
					4		50.30	49.70							8014	14426	
					5	7.79	46.38	45.83							7389	13301	

TABLE 12.–*Proximate-ultimate coal analyses by bed*

Footnote key:

1. File number: A basic 6-digit sample number is used. Suffixes A through I indicate samples taken at different points in the same location; K denotes composite of these samples. Suffixes 1 through 8 indicate samples taken vertically or in benches at some point; 9 denotes composite of these samples; where samples have been taken vertically at one point only, letter suffix is not needed or used
2. Kind: 1 - channel (mine); 2 - channel (outcrop); 3 - column or core; 4 - gross mine sample; 7 - tipple
3. Source: 1 - U.S. Bureau of Mines and/or U.S. Geological Survey; 2 - Ohio Geological Survey; 3 - Engineering Experiment Station, Ohio State University; 4 - special or miscellaneous
4. Condition: 1 - as received; 2 - moisture-free; 3 - moisture- and ash-free; 4 - dry unit coal; 5 - moist unit coal
5. Sample wet; moisture probably 2% high
6. Condition 1 air-dried; composite (9) weighted average calculated on thickness in 4 component units, 585 (1-4)
7. Condition 1 air-dried; composite (9) total or average calculated on thickness
8. Not in composite 587 9
9. Not in composite 598 B 9
10. Not in composite 596 A 9
11. Equilibrated values available in files of Ohio Geological Survey
12. Condition 1 air-dried; boghead coal
13. Ultimate and calorific value tests made several weeks after preparation of sample; calories probably 100° high
14. Duplicate sample taken 10 months after 604 B
15. Coal sample crushed to -60 mesh and stored for some time; probably somewhat weathered before Btu determination
16. Not in composite 170 K
17. No exact location or thickness available; use as general-purpose sample
18. Not in composite 486 K
19. Average values calculated on weight of individual sections
20. See also 301 A in Lower Kittanning from the same mine on the same date
21. See also 301 B in Middle Kittanning from the same mine on the same date
22. Duplicate sample taken 15 days after 607 A

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Proximate analysis: Ash	Proximate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								WASHINGTON									
BELMONT	WASHINGTON	152	1	1	1	4.08	33.69	41.23	21.00	2.86	4.76	59.93	1.09	10.36	6012	10822	14
					2		35.12	42.98	21.90	2.98	4.49	62.48	1.14	7.01	6268	11282	
					3		44.97	55.03		3.82	5.75	80.00	1.46	8.97	8026	14446	
					4		43.07	56.93							8279	14902	
					5	5.39	40.75	53.86							7833	14098	
								WAYNESBURG A									
MORGAN	WINDSOR	499	1	2	1	4.08	38.54	50.26	7.12	4.45	6.30	58.40	1.08	22.65	6197	11154	29
					2		40.18	52.40	7.42	4.64	6.10	60.88	1.13	19.83	6460	11628	
					3		43.40	56.60		5.01	6.59	65.76	1.22	21.42	6978	12560	
					4		42.19	57.81							7079	12742	
					5	4.54	40.27	55.19							6758	12165	
								WAYNESBURG									
BELMONT	COLERAIN	214	1	2	1	5.27	37.42	42.61	14.70	2.19	4.97	64.45	1.44	12.25	6434	11581	27
					2		39.50	44.98	15.52	2.31	4.62	68.04	1.52	7.99	6792	12225	
					3		46.76	53.24		2.73	5.47	80.54	1.80	9.46	8040	14471	
					4		45.55	54.45							8207	14773	
					5	6.36	42.65	50.99							7686	13835	
"	GOSHEN	213	1	1	1	4.31	35.32	44.15	16.22	3.53	4.98	64.10	1.20	9.97	6447	11605	14
					2		36.91	46.14	16.95	3.69	4.70	66.98	1.25	6.43	6737	12127	
					3		44.44	55.56		4.44	5.66	80.65	1.51	7.74	8112	14602	
					4		42.78	57.22							8328	14991	
					5	5.35	40.49	54.16							7883	14190	
"	MEAD	212	1	2	1	3.51	37.68	41.94	16.87	3.59	4.70	63.18	1.25	10.41	6320	11377	27
					2		39.05	43.47	17.48	3.72	4.47	65.48	1.29	7.56	6550	11791	
					3		47.32	52.68		4.61	5.42	79.35	1.56	9.16	7937	14289	
					4		45.73	54.27							8153	14676	
					5	4.40	43.72	51.88							7795	14031	
"	RICHLAND	211	1	2	1	3.58	37.36	45.89	13.07	1.75					6678	12020	27
					2		38.78	47.65	13.57	1.82					6933	12479	
					3		44.87	55.13		2.11					8022	14438	
					4		43.83	56.17							8160	14688	
					5	4.33	41.94	53.73							7806	14051	
"	SMITH	209	1	2	1	1.78	39.16	43.65	15.41	2.68	4.87	65.15	1.18	10.71	6505	11709	26
					2		39.87	44.44	15.69	2.73	4.75	66.33	1.20	9.30	6623	11921	
					3		47.29	52.71		3.24	5.63	78.68	1.42	11.03	7856	14139	
					4		46.01	53.99							8028	14450	
					5	2.17	45.01	52.82							7853	14136	
"	"	210	1	2	1	5.72	35.56	44.31	14.11	2.50					6439	11590	27
					2		38.03	47.01	14.96	2.65					6830	12293	
					3		44.72	55.28		3.12					8032	14456	
					4		43.42	56.58							8200	14760	
					5	6.86	40.45	52.69							7638	13749	
"	SOMERSET	153	1	1	1	4.46	36.60	44.19	14.75	3.02	5.10	65.32	1.16	10.65	6553	11795	14
					2		38.31	46.25	15.44	3.16	4.81	68.37	1.21	7.01	6859	12346	
					3		45.31	54.69		3.74	5.69	80.85	1.43	8.29	8111	14600	
					4		43.89	56.11							8299	14939	
					5	5.41	41.52	53.07							7850	14130	
"																	
"	WASHINGTON	164	1	1	1	4.57	36.81	44.17	14.45	2.59					6574	11833	14
					2		38.57	46.29	15.14	2.71					6889	12400	
					3		45.45	54.55		3.19					8118	14612	
					4		44.15	55.85							8293	14928	
					5	5.51	41.72	52.77							7837	14106	
"	WAYNE	154	1	1	1	4.40	37.10	43.06	15.44	2.90					6476	11657	14
					2		38.81	45.04	16.15	3.03					6774	12193	
					3		46.29	53.71		3.61					8079	14541	
					4		44.88	55.12							8270	14886	
					5	5.38	42.47	52.15							7825	14085	
"	"	208	2	2	1	5.69	38.38	39.70	16.33	3.20					6110	10999	26
					2		40.66	42.05	17.29	3.39					6472	11650	
					3		49.16	50.84		4.10					7825	14085	
					4		47.72	52.28							8027	14448	
					5	6.94	44.40	48.66							7471	13447	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
								WAYNESBURG (CON.)									
BELMONT (Cont'd.)	YORK	207	1	2	1	2.84	40.07	43.75	13.34	4.91					6526	11746	26
					2		41.24	45.03	13.73	5.06					6716	12089	
					3		47.80	52.20		5.87					7785	14013	
					4		46.27	53.73							7981	14366	
					5	3.43	44.68	51.89							7708	13874	
								UNIONTOWN									
BELMONT	GOSHEN	155	1	1	1	4.70	34.21	45.75	15.34	2.85	4.95	63.71	1.33	11.82	6479	11662	14
					2		35.90	48.00	16.10	2.99	4.65	66.85	1.40	8.01	6799	12238	
					3		42.79	57.21		3.56	5.54	79.68	1.67	9.55	8104	14586	
					4		41.27	58.73							8294	14930	
					5	5.74	38.90	55.36							7817	14071	
"	"	216	1	2	1	.83	41.21	44.29	13.67	2.59					6747	12145	26
					2		41.56	44.66	13.78	2.61					6803	12246	
					3		48.20	51.80		3.03					7890	14203	
					4		47.10	52.90							8043	14478	
					5	.99	46.63	52.38							7964	14336	
MONROE	ADAMS	156	1	1	1	4.85	35.93	43.90	15.32	3.96	4.87	63.59	1.19	11.07	6412	11542	14
					2		37.76	46.14	16.10	4.16	4.55	66.83	1.25	7.11	6739	12130	
					3		45.01	54.99		4.96	5.42	79.66	1.49	8.47	8032	14458	
					4		43.33	56.67							8246	14842	
					5	5.97	40.75	53.28							7754	13957	
"	"	215	1	2	1	2.57	40.87	42.82	13.74	3.06	4.83	65.96	1.37	11.04	6573	11831	26
					2		41.95	43.94	14.11	3.15	4.73	67.68	1.40	8.93	6746	12143	
					3		48.84	51.16		3.67	5.51	78.79	1.63	10.40	7854	14138	
					4		47.65	52.35							8019	14435	
					5	3.08	46.17	50.75							7772	13989	
								MEIGS CREEK									
BELMONT	FLUSHING	149	1	1	1	4.63	33.84	52.50	9.03	2.18							6
					2		35.48	55.05	9.47	2.29							
					3		39.19	60.81		2.53							
					4		38.19	61.81									
					5	5.20	36.21	58.59									
"	"	177	1	1	1	5.51	35.95	49.89	8.65	2.31							6
					2		38.05	52.80	9.15	2.44							
					3		41.88	58.12		2.69							
					4		40.94	59.06									
					5	6.16	38.41	55.43									
"	"	423	1	2	1	4.98	33.30	48.90	12.82	2.41	4.95	66.31	1.19	12.32	6652	11974	7
					2		35.05	51.46	13.49	2.53	4.63	69.79	1.25	8.31	7001	12602	
					3		40.52	59.48		2.92	5.35	80.68	1.44	9.61	8093	14567	
					4		39.22	60.78							8247	14845	
					5	5.87	36.91	57.22							7713	13973	
"	GOSHEN	148	1	1	1	4.23	36.41	47.91	11.45	3.16							6
					2		38.02	50.02	11.96	3.30							
					3		43.18	56.82		3.75							
					4		41.92	58.08									
					5	4.92	39.86	55.22									
"	"	422	1	2	1	3.40	35.72	45.94	14.94	4.39	4.86	64.77	1.08	9.96	6578	11840	7
					2		36.98	47.56	15.46	4.54	4.64	67.05	1.12	7.19	6809	12256	
					3		43.74	56.26		5.37	5.49	79.32	1.32	8.50	8054	14497	
					4		41.99	58.01							8270	14886	
					5	4.17	40.24	55.59							7926	14267	
"	PEASE	421	1	2	1	4.55	36.19	42.97	16.19	3.13	4.72	62.63	1.26	12.07	6265	11278	27
					2		37.95	45.07	16.98	3.28	4.41	65.68	1.32	8.33	6571	11828	
					3		45.71	54.29		3.95	5.31	79.12	1.59	10.03	7915	14247	
					4		44.18	55.82							8114	14606	
					5	5.76	41.64	52.60							7647	13765	
"	PULTNEY	419	1	2	1	3.88	38.84	43.96	13.32	2.71					6643	11958	27
					2		40.41	45.73	13.86	2.82					6911	12441	
					3		46.91	53.09		3.27					8023	14443	
					4		45.73	54.27							8186	14734	
					5	4.61	43.62	51.77							7808	14054	
"	"	420	1	2	1	4.13	39.58	42.47	13.82	3.38	5.03	65.61	1.21	10.95	6584	11852	27
					2		41.29	44.30	14.41	3.52	4.77	68.44	1.26	7.60	6868	12363	
					3		48.24	51.76		4.11	5.57	79.97	1.47	8.88	8024	14444	
					4		46.94	53.06							8207	14772	
					5	4.96	44.61	50.43							7799	14039	
"	RICHLAND	417	1	2	1	5.51	38.18	44.01	12.30	2.60					6642	11956	27
					2		40.41	46.57	13.02	2.75					7029	12653	
					3		46.46	53.54		3.16					8081	14547	
					4		45.33	54.67							8236	14824	
					5	6.46	42.39	51.15							7703	13866	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B.t.u.	Year
								MEIGS CREEK (CON.)									
BELMONT	RICHLAND	418	1	2	1	467	3986	4326	1221	336					6672	12010	27
					2		4181	4538	1281	352					6999	12598	
					3		4795	5205		404					8027	14449	
					4		4675	5325							8193	14748	
					5	550	4418	5032							7743	13937	
"	"	600	1	3	1	314	3599	4411	1676	321	480	6417	101	1005	6415	11547	53
					2		3716	4564	1730	332	460	6625	104	749	6623	11921	
					3		4493	5507		401	556	8011	126	906	8008	14415	
					4		4333	5667							8216	14788	
					5	392	4164	5444							7894	14209	
"	SMITH	416	1	2	1	352	3474	4990	1184	367	502	6736	105	1106	6884	12391	7
					2		3601	5172	1227	380	480	6982	109	822	7135	12843	
					3		4105	5895		433	547	7959	124	937	8133	14639	
					4		3958	6042							8303	14946	
					5	413	3794	5793							7961	14329	
"	UNION	414	1	2	1	417	3509	5114	960	311	497	6990	109	1133	7001	12602	7
					2		3662	5336	1002	324	470	7294	114	796	7306	13150	
					3		4070	5930		360	522	8106	127	885	8120	14614	
					4		3950	6050							8256	14861	
					5	474	3763	5763							7864	14156	
"	"	415	1	2	1	431	3247	5154	1168	194	509	6832	111	1186	6837	12307	7
					2		3393	5386	1221	203	482	7140	115	839	7145	12861	
					3		3865	6135		231	549	8133	131	956	8139	14650	
					4		3751	6249							8272	14889	
					5	499	3564	5937							7858	14145	
"	WARREN	157	1	1	1	434	3895	4550	1121	365	531	6817	120	1046	6890	12402	14
					2		4072	4756	1172	382	505	7126	125	690	7203	12965	
					3		4613	5387		433	572	8071	142	782	8159	14686	
					4		4488	5512							8326	14986	
					5	505	4261	5234							7904	14228	
"	'	413	1	2	1	447	3531	4715	1307	327	499	6583	113	1171	6668	12002	7
					2		3696	4936	1368	342	471	6891	118	810	6980	12564	
					3		4282	5718		396	546	7984	136	938	8086	14555	
					4		4139	5861							8261	14870	
					5	532	3919	5549							7822	14079	
"	WASHINGTON	165	1	1	1	351	3715	4153	1781	405					6396	11513	14
					2		3850	4304	1846	420					6629	11932	
					3		4722	5278		515					8130	14633	
					4		4546	5454							8376	15076	
					5	447	4342	5211							8001	14401	
"	WAYNE	412	1	2	1	421	3951	4386	1242	281					6786	12214	27
					2		4125	4578	1297	294					7084	12751	
					3		4740	5260		338					8140	14651	
					4		4627	5373							8299	14938	
					5	495	4397	5108							7887	14197	
"	WHEELING	411[5]	1	2	1	752	3175	4949	1124	211	514	6641	111	1399	6589	11860	7
					2		3433	5352	1215	228	465	7181	121	790	7125	12824	
					3		3908	6092		260	529	8174	138	899	8110	14598	
					4		3789	6211							8246	14843	
					5	867	3451	5672							7532	13558	
"	"	585	1[6]	1	3	235	3143	4181	2441	234					5757	10363	49
					2		3219	4281	2500	240					5897	10615	
					3		4292	5708		320					7863	14153	
					4		4078	5922							8134	14641	
					5	325	3945	5730							7868	14162	
"	"	585	2[6]	1	3	245	3457	5273	1025	261					6937	12488	49
					2		3544	5405	1051	268					7111	12801	
					3		3960	6040		299					7946	14304	
					4		3846	6154							8073	14531	
					5	280	3738	5982							7847	14124	
"	"	585	3[6]	1	3	242	3453	5233	1072	193					6962	12533	49
					2		3538	5363	1099	198					7135	12844	
					3		3975	6025		222					8016	14430	
					4		3873	6127							8134	14642	
					5	277	3766	5957							7909	14236	
"	"	585	4[6]	1	3	219	3945	4959	877	335					7149	12869	49
					2		4033	5070	897	343					7309	13157	
					3		4430	5570		377					8029	14453	
					4		4325	5675							8158	14685	
					5	247	4218	5535							7957	14322	
"	"	585	9[6]	1	3	237	3476	4941	1346	245					6710	12078	49
					2		3560	5061	1379	251					6872	12371	
					3		4129	5871		291					7971	14350	
					4		4000	6000							8126	14626	
					5	282	3888	5830							7896	14213	
"	YORK	410	1	2	1	326	4094	4482	1098	386	506	6907	119	984	6946	12502	27
					2		4232	4634	1134	400	486	7139	123	718	7180	12923	
					3		4773	5227		451	548	8052	139	810	8098	14576	
					4		4654	5346							8262	14872	
					5	379	4478	5143							7950	14310	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
						MEIGS CREEK (CON.)											
HARRISON	ATHENS	409		1	2												
					1	5.35	33.09	51.27	10.29	2.20	5.21	68.67	1.25	12.38	6885	12393	7
					2		34.96	54.17	10.87	2.32	4.88	72.55	1.32	8.06	7274	13093	
					3		39.22	60.78		2.60	5.48	81.40	1.48	9.04	8191	14690	
					4		38.13	61.87							8288	14919	
					5	6.10	35.80	58.10							7783	14009	
"	"	521	1	1	3												
					1	1.93	39.13	49.89	9.05	4.19					7074	12733	49
					2		39.90	50.87	9.23	4.27					7213	12983	
					3		43.96	56.04		4.70					7946	14303	
					4		42.71	57.29							8091	14563	
					5	2.20	41.77	56.03							7913	14244	
"	"	521	2	1	3												
					1	1.73	36.98	47.53	13.76	3.10					6810	12259	49
					2		37.63	48.36	14.01	3.15					6930	12475	
					3		43.76	56.24		3.66					8059	14508	
					4		42.40	57.60							8231	14816	
					5	2.07	41.52	56.41							8059	14507	
"	"	521	3	1	3												
					1	1.93	34.70	49.21	14.16	4.05					6737	12126	49
					2		35.38	50.18	14.44	4.13					6869	12365	
					3		41.35	58.65		4.83					8028	14452	
					4		39.66	60.34							8224	14803	
					5	2.34	38.73	58.93							8031	14456	
"	"	521	4	1	3												
					1	1.86	37.34	52.14	8.66	2.42					7203	12966	49
					2		38.05	53.13	8.82	2.47					7340	13212	
					3		41.73	58.27		2.71					8050	14490	
					4		40.80	59.20							8159	14687	
					5	2.08	39.95	57.97							7989	14381	
"	"	521	5	1	3												
					1	1.72	39.38	50.87	8.03	2.42					7306	13151	49
					2		40.07	51.76	8.17	2.46					7434	13381	
					3		43.63	56.37		2.68					8095	14571	
					4		42.79	57.21							8200	14760	
					5	1.91	41.97	56.12							8043	14478	
"	"	521	9	1	3												
					1	1.87	37.18	50.00	10.95	3.41					6993	12588	49
					2		37.89	50.95	11.16	3.47					7126	12828	
					3		42.65	57.35		3.91					8021	14439	
					4		41.39	58.61							8171	14708	
					5	2.17	40.48	57.35							7994	14389	
"	"	523	1	1	3												
					1	1.90	38.13	49.86	10.11	3.67					7031	12656	49
					2		38.87	50.83	10.30	3.74					7167	12901	
					3		43.33	56.67		4.17					7990	14382	
					4		42.10	57.90							8136	14644	
					5	2.18	41.18	56.64							7959	14326	
"	"	523	2	1	3												
					1	2.02	33.68	50.14	14.26	1.79					6674	12014	49
					2		34.27	51.18	14.55	1.83					6812	12261	
					3		40.11	59.89		2.14					7972	14349	
					4		38.87	61.13							8118	14613	
					5	2.42	37.94	59.64							7923	14261	
"	"	523	3	1	3												
					1	2.16	34.76	54.78	8.30	1.45					7163	12894	49
					2		35.63	55.99	8.48	1.48					7321	13178	
					3		38.82	61.18		1.62					7999	14399	
					4		38.05	61.95							8087	14556	
					5	2.39	37.15	60.46							7893	14208	
"	"	523	4	1	3												
					1	1.90	31.71	47.52	18.87	1.11					6294	11329	49
					2		32.32	48.45	19.23	1.13					6416	11548	
					3		40.01	59.99		1.40					7944	14297	
					4		38.58	61.42							8121	14618	
					5	2.40	37.67	59.93							7927	14268	
"	"	523	5	1	3												
					1	2.06	35.82	55.17	6.95	1.35					7277	13099	49
					2		36.57	56.33	7.10	1.38					7430	13374	
					3		39.36	60.64		1.49					7998	14396	
					4		38.71	61.29							8072	14529	
					5	2.25	37.84	59.91							7891	14203	
"	"	523	6	1	3												
					1	2.20	34.88	51.31	11.61	2.56					6803	12246	49
					2		35.66	52.47	11.87	2.62					6957	12522	
					3		40.46	59.54		2.97					7894	14209	
					4		39.26	60.74							8029	14452	
					5	2.56	38.26	59.18							7823	14082	
"	"	523	9	1	3												
					1	2.03	35.28	51.43	11.26	2.21					6910	12438	49
					2		36.01	52.50	11.49	2.26					7053	12696	
					3		40.68	59.32		2.55					7969	14344	
					4		39.59	60.41							8096	14572	
					5	2.34	38.67	58.99							7906	14231	
MONROE	PERRY	408		1	2												
					1	2.32	39.30	43.84	14.54	3.55	4.93	66.78	.95	9.21	6759	12167	27
					2		40.23	44.89	14.88	3.68	4.78	68.37	.97	7.32	6920	12456	
					3		47.26	52.74		4.32	5.62	80.32	1.14	8.60	8130	14633	
					4		45.87	54.13							8324	14983	
					5	2.82	44.58	52.60							8090	14562	
MORGAN	BRISTOL	407		1	2												
					1	5.05	37.83	46.75	10.37	4.30	5.14	67.04	.89	12.26	6730	12114	7
					2		39.84	49.24	10.92	4.53	4.82	70.61	.94	8.18	7088	12758	
					3		44.72	55.28		5.09	5.41	79.26	1.06	9.18	7957	14322	
					4		43.35	56.65							8122	14620	
					5	5.84	40.82	53.34							7648	13766	

County	Township	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B t u	
									MEIGS CREEK (CON.)								
MORGAN	BRISTOL	542	7	3	1	359	3976	4154	1501	621					6497	11694	50
					2		4128	4313	1559	645					6746	12142	
					3		4890	5110		764					7992	14385	
					4		4704	5296							8248	14846	
					5	459	4489	5052							7868	14163	
"	"	597 A1	3	3	1	220	3742	4347	1691	740					6386	11496	53
					2		3826	4445	1729	757					6530	11755	
					3		4626	5374		915					7895	14212	
					4		4387	5613							8190	14743	
					5	283	4263	5454							7958	14325	
"	"	597 A2	3	3	1	212	3911	4467	1410	698					6640	11953	53
					2		3996	4564	1440	713					6784	12212	
					3		4668	5332		833					7926	14267	
					4		4455	5535							8180	14724	
					5	252	4348	5390							7965	14337	
"	"	597 A3	3	3	1	216	4074	4599	1111	482					6929	12472	53
					2		4164	4700	1136	493					7081	12747	
					3		4698	5302		566					7988	14380	
					4		4559	5441							8168	14703	
					5	253	4443	5304							7961	14330	
"	"	597 A4	3	3	1	194	3440	3970	2396	385					5819	10474	53
					2		3508	4049	2443	393					5934	10681	
					3		4642	5358		520					7852	14133	
					4		4416	5584							8151	14673	
					5	269	4298	5433							7932	14278	
"	"	597 A5	3	3	1	218	4399	4757	626	481					7312	13162	53
					2		4497	4863	640	492					7475	13455	
					3		4804	5196		525					7986	14375	
					4		4701	5299							8119	14615	
					5	241	4588	5171							7924	14263	
"	"	597 A6	3	3	1	192	4091	4660	1057	378					7004	12608	53
					2		4171	4751	1078	385					7141	12855	
					3		4675	5325		432					8004	14408	
					4		4558	5442							8157	14683	
					5	221	4458	5321							7976	14356	
"	"	597 A7	3	3	1	203	3918	4527	1352	405					6660	11988	53
					2		3999	4621	1380	413					6797	12236	
					3		4639	5361		479					7886	14195	
					4		4496	5504							8068	14524	
					5	24[illegible]	4386	5370							7872	14170	
"	"	597 A8	3	3	1	18[illegible]	3957	4310	1548	339					6516	11729	53
					2		4032	4391	1577	345					6639	11950	
					3		4787	5213		410					7882	14188	
					4		4648	5352							8070	14527	
					5	227	4542	5231							7887	14197	
"	"	597 A9	3	3	1	214	3959	4478	1349	493	497	6613	103	945	6704	12067	53
					2		4046	4576	1378	504	484	6758	105	771	6851	12331	
					3		4693	5307		585	561	7838	122	894	7946	14302	
					4		4535	5465							8149	14669	
					5	269	4417	5324							7939	14290	
"	"	597 B1	3	3	1	192	3825	4243	1740	491	474	6209	96	990	6318	11373	53
					2		3900	4326	1774	501	462	6330	98	835	6442	11596	
					3		4741	5259		609	562	7695	119	1015	7831	14097	
					4		4556	5444							8072	14530	
					5	245	4444	5311							7874	14174	
"	"	597 B2	3	3	1	178	3128	3086	3608	328					4720	8497	53
					2		3185	3142	3673	334					4806	8651	
					3		5034	4966		528					7596	13673	
					4		4714	5286							8058	14504	
					5	301	4572	5127							7816	14069	
"	"	597 B3	3	3	1	196	3646	3883	2275	531					5777	10399	53
					2		3719	3961	2320	542					5892	10607	
					3		4842	5158		706					7672	13811	
					4		4609	5391							7979	14363	
					5	270	4485	5245							7764	13975	
"	"	597 C1	3	3	1	235	3859	4580	1326	556					6641	11954	53
					2		3952	4690	1358	569					6801	12242	
					3		4573	5427		658					7870	14166	
					4		4399	5601							8081	14546	
					5	284	4274	5442							7851	14132	
"	"	597 C2	3	3	1	211	3379	3706	2704	316					5494	9889	53
					2		3452	3786	2762	323					5612	10102	
					3		4769	5231		446					7754	13957	
					4		4535	5465							8074	14534	
					5	306	4396	5298							7828	14091	
"	"	597 C3	3	3	1	232	3971	4409	1388	507					6560	11809	53
					2		4065	4514	1421	519					6716	12089	
					3		4738	5262		605					7828	14091	
					4		4577	5423							8034	14462	
					5	282	4448	5270							7808	14054	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
								MEIGS CREEK (CON.)									
MORGAN	BRISTOL	597 C4	3	3	1	1.80	29.08	30.23	38.89	2.50					4458	8024	53
					2		29.61	30.79	39.60	2.55					4540	8171	
					3		49.02	50.98		4.22					7517	13528	
					4		45.54	54.46							8004	14407	
					5	3.18	44.09	52.73							7750	13950	
"	"	597 C9	3	3	1	2.36	38.32	43.66	15.66	5.20	4.76	63.15	.97	10.26	6430	11575	53
					2		39.25	44.71	16.04	5.33	4.61	64.67	.99	8.36	6585	11855	
					3		46.75	53.25		6.35	5.49	77.02	1.18	9.96	7843	14120	
					4		44.94	55.06							8073	14532	
					5	2.94	43.61	53.45							7836	14104	
"	CENTER	495	1	2	1	2.53	41.22	42.40	13.85	5.66					6680	12024	29
					2		42.29	43.50	14.21	5.81					6853	12336	
					3		49.29	50.71		6.77					7988	14379	
					4		47.67	52.33							8215	14787	
					5	3.09	46.19	50.72							7962	14331	
"	MANCHESTER	406	1	2	1	4.07	37.61	47.66	10.66	5.07	5.10	66.19	.87	12.11	6779	12202	7
					2		39.21	49.68	11.11	5.29	4.84	69.00	.91	8.85	7067	12720	
					3		44.11	55.89		5.95	5.44	77.63	1.02	9.96	7950	14310	
					4		42.55	57.45							8132	14638	
					5	4.75	40.52	54.73							7746	13942	
"	MEIGSVILLE	405	1	2	1	5.13	36.07	47.06	11.74	4.89	5.06	64.77	.87	12.67	6625	11925	7
					2		38.02	49.60	12.38	5.15	4.73	68.27	.92	8.55	6983	12569	
					3		43.39	56.61		5.88	5.40	77.91	1.05	9.76	7970	14345	
					4		41.73	58.27							8162	14692	
					5	6.06	39.20	54.74							7668	13802	
MUSKINGUM	BLUE ROCK	404	1	2	1	5.16	40.12	41.58	13.14	5.07	5.22	63.25	.86	12.46	6429	11572	17
					2		42.30	43.84	13.86	5.34	4.90	66.69	.90	8.31	6779	12202	
					3		49.11	50.89		6.20	5.69	77.42	1.04	9.65	7870	14165	
					4		47.57	52.43							8077	14538	
					5	6.22	44.61	49.17							7574	13633	
NOBLE	BEAVER	172	1	1	1	4.14	38.42	44.82	12.62	3.61	5.22	66.87	1.20	10.48	6739	12130	14
					2		40.08	46.75	13.17	3.77	4.97	69.76	1.25	7.08	7030	12654	
					3		46.16	53.84		4.34	5.72	80.35	1.44	8.15	8096	14573	
					4		44.82	55.18							8274	14893	
					5	4.91	42.62	52.47							7867	14161	
"	"	587 18	1	3	1	4.49	28.97	37.27	29.27	14.01					5118	9214	52
					2		30.33	39.02	30.65	14.67					5359	9647	
					3		43.73	56.27		21.15					7727	13911	
					4		37.41	62.59							8417	15151	
					5	7.40	34.65	57.95							7794	14029	
"	"	587 2	1	3	1	4.56	39.92	44.44	10.98	4.21					6869	12364	52
					2		41.87	46.61	11.52	4.42					7205	12968	
					3		47.32	52.68		5.00					8143	14656	
					4		46.03	53.97							8319	14974	
					5	5.43	43.53	51.04							7867	14161	
"	"	587 3	1	3	1	3.96	38.35	44.16	13.53	4.18					6700	12060	52
					2		39.93	45.98	14.09	4.35					6976	12557	
					3		46.48	53.52		5.06					8121	14618	
					4		44.98	55.02							8321	14977	
					5	4.77	42.84	52.39							7924	14263	
"	"	587 4	1	3	1	3.55	38.50	43.51	14.34	5.00					6631	11936	52
					2		39.96	45.16	14.88	5.19					6882	12388	
					3		46.95	53.05		6.10					8085	14553	
					4		45.26	54.74							8311	14960	
					5	4.46	43.24	52.30							7941	14293	
"	"	587 9	1	3	1	3.97	38.68	44.06	13.29	4.49	4.98	64.30	1.02	11.92	6686	12036	52
					2		40.28	45.88	13.84	4.68	4.72	66.96	1.06	8.74	6962	12534	
					3		46.75	53.25		5.43	5.48	77.72	1.23	10.14	8080	14547	
					4		45.22	54.78							8285	14913	
					5	4.77	43.07	52.16							7889	14200	
"	BROOKFIELD	402	1	2	1	4.85	37.28	48.05	9.82	5.59	5.26	66.01	.97	12.35	6834	12301	7
					2		39.18	50.50	10.32	5.87	4.96	69.37	1.01	8.47	7182	12928	
					3		43.69	56.31		6.55	5.53	77.35	1.13	9.44	8008	14416	
					4		42.05	57.95							8197	14755	
					5	5.62	39.69	54.69							7737	13927	
"	"	403	1	2	1	3.54	37.41	45.82	13.23	6.21	5.12	64.44	.88	10.12	6642	11956	7
					2		38.78	47.50	13.72	6.44	4.90	66.80	.91	7.23	6886	12395	
					3		44.95	55.05		7.46	5.68	77.43	1.05	8.38	7981	14366	
					4		43.00	57.00							8216	14788	
					5	4.30	41.15	54.55							7862	14151	
"	"	543 17	1	3	1	2.35	37.68	42.08	17.89	7.50					6065	10918	49
					2		38.59	43.09	18.32	7.68					6211	11181	
					3		47.25	52.75		9.40					7604	13689	
					4		44.81	55.19							7893	14208	
					5	3.07	43.43	53.50							7651	13772	
"	"	543 27	1	3	1	2.75	37.47	46.46	13.32	6.21					6334	11401	49
					2		38.53	47.77	13.70	6.39					6512	11723	
					3		44.65	55.35		7.40					7546	13584	
					4		42.70	57.30							7756	13960	
					5	3.35	41.26	55.39							7496	13492	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
						MEIGS CREEK (CON.)											
NOBLE	BROOKFIELD	543 37	1	3	1	3.26	38.16	50.36	8.22	4.04					6920	12457	49
					2		39.44	52.06	8.50	4.18					7153	12877	
					3		43.10	56.90		4.57					7817	14073	
					4		41.90	58.10							7951	14311	
					5	3.67	40.36	55.97							7658	13785	
"	"	543 4 7	1	3	1	3.23	33.75	44.33	18.69	2.69					6079	10943	49
					2		34.88	45.81	19.31	2.78					6282	11308	
					3		43.23	56.77		3.45					7785	14014	
					4		41.52	58.48							7994	14390	
					5	4.12	39.31	56.07							7666	13798	
"	"	543 9 7	1	3	1	2.84	37.21	45.96	13.99	5.50					6375	11476	49
					2		38.30	47.30	14.40	5.66					6561	11811	
					3		44.74	55.26		6.61					7665	13798	
					4		42.89	57.11							7874	14173	
					5	3.47	41.40	55.13							7601	13682	
"	"	598 A1	3	3	1	2.47	41.16	45.70	10.67	3.58					6874	12373	53
					2		42.20	46.86	10.94	3.67					7048	12686	
					3		47.38	52.62		4.12					7914	14244	
					4		46.26	53.74							8061	14510	
					5	2.86	44.93	52.21							7831	14096	
"	"	598 A2	3	3	1	2.28	38.43	42.52	16.77	5.28					6329	11392	53
					2		39.33	43.51	17.16	5.40					6477	11658	
					3		47.48	52.52		6.52					7819	14073	
					4		45.60	54.40							8060	14508	
					5	2.89	44.28	52.83							7827	14089	
"	"	598 A3	3	3	1	2.22	41.65	47.59	8.54	3.36					7151	12873	53
					2		42.60	48.67	8.73	3.44					7313	13165	
					3		46.67	53.33		3.77					8012	14424	
					4		45.70	54.30							8140	14652	
					5	2.50	44.55	52.95							7937	14287	
"	"	598 A4	3	3	1	2.28	41.24	47.71	8.77	4.29					7052	12695	53
					2		42.20	48.82	8.98	4.39					7217	12991	
					3		46.36	53.64		4.82					7929	14273	
					4		45.20	54.80							8073	14532	
					5	2.59	44.03	53.38							7864	14155	
"	"	598 A5	3	3	1	2.12	34.43	39.95	23.50	5.88					5736	10326	53
					2		35.18	40.82	24.00	6.01					5860	10550	
					3		46.29	53.71		7.91					7711	13882	
					4		43.60	56.40							8046	14482	
					5	2.97	42.30	54.73							7807	14053	
"	"	598 A9	3	3	1	2.41	37.79	43.25	16.55	4.88	4.76	62.88	1.01	9.92	6361	11450	53
					2		38.72	44.32	16.96	5.00	4.60	64.43	1.04	7.97	6518	11733	
					3		46.63	53.37		6.02	5.54	77.59	1.25	9.60	7849	14129	
					4		44.80	55.20							8082	14548	
					5	3.03	43.45	53.52							7837	14106	
"	"	598 B1 9	3	3	1	2.17	24.38	30.16	43.29	13.50					3846	6923	53
					2		24.92	30.83	44.25	13.80					3931	7077	
					3		44.70	55.30		24.75					7051	12694	
					4		35.55	64.45							7952	14314	
					5	4.74	33.86	61.40							7575	13635	
"	"	598 B2	3	3	1	2.55	37.70	41.20	18.55	8.62					6120	11016	53
					2		38.59	42.28	19.03	8.85					6280	11304	
					3		47.78	52.22		10.93					7756	13961	
					4		45.09	54.91							8091	14564	
					5	3.39	43.56	53.05							7817	14071	
"	"	598 B3	3	3	1	2.62	39.48	44.55	13.35	4.35					6607	11894	53
					2		40.54	45.75	13.71	4.47					6785	12214	
					3		46.98	53.02		5.18					7863	14155	
					4		45.51	54.49							8052	14493	
					5	3.15	44.08	52.77							7798	14036	
"	"	598 B4	3	3	1	2.46	39.47	44.89	13.18	3.64					6700	12060	53
					2		40.47	46.02	13.51	3.73					6869	12364	
					3		46.79	53.21		4.31					7942	14295	
					4		45.46	54.54							8116	14609	
					5	2.94	44.12	52.94							7878	14180	
"	"	598 B5	3	3	1	2.21	35.07	40.25	22.47	5.23					5805	10449	53
					2		35.86	41.16	22.98	5.35					5936	10685	
					3		46.56	53.44		6.95					7707	13873	
					4		44.13	55.87							8012	14421	
					5	3.03	42.80	54.17							7768	13983	
"	"	598 B9	3	3	1	2.54	37.62	42.50	17.24	4.98	4.69	62.55	.93	9.61	6277	11299	53
					2		38.64	43.65	17.71	5.12	4.51	64.25	.95	7.46	6447	11605	
					3		46.96	53.04		6.22	5.48	78.08	1.15	9.07	7834	14103	
					4		45.06	54.94							8077	14539	
					5	3.36	43.55	53.09							7806	14051	
"	"	598 C1	3	3	1	3.33	37.13	44.16	15.38	5.94					6311	11361	53
					2		38.41	45.68	15.91	6.14					6528	11752	
					3		45.68	54.32		7.30					7763	13976	
					4		43.66	56.34							8004	14407	
					5	4.16	41.84	54.00							7672	13809	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
								MEIGS CREEK (CON.)									
NOBLE (Cont'd.)	BROOKFIELD	598 C2	3	3	1	319	3667	4242	1772	556					6136	11045	53
					2		3788	4382	1830	574					6338	11409	
					3		4636	5364		703					7758	13965	
					4		4427	5573							8016	14429	
					5	410	4245	5345							7688	13839	
"	"	598 C3	3	3	1	353	3988	4576	1083	422					6777	12199	53
					2		4134	4743	1123	437					7025	12645	
					3		4657	5343		492					7914	14245	
					4		4527	5473							8077	14539	
					5	411	4341	5248							7746	13942	
"	"	598 C4	3	3	1	289	3261	3501	2949	733					5115	9208	53
					2		3358	3605	3037	755					5267	9482	
					3		4823	5177		1084					7564	13618	
					4		4462	5538							8023	14441	
					5	451	4260	5289							7661	13789	
"	"	598 C9	3	3	1	314	3676	4184	1826	556					6124	11023	53
					2		3795	4320	1885	574					6323	11380	
					3		4677	5323		707					7792	14023	
					4		4464	5536							8057	14503	
					5	407	4283	5310							7731	13915	
"	CENTER	401	1	2	1	462	4113	4401	1024	417					6791	12224	27
					2		4312	4614	1074	437					7120	12816	
					3		4831	5169		490					7977	14358	
					4		4711	5289							8138	14649	
					5	533	4460	5007							7704	13867	
"	ELK	400	1	2	1	306	3843	4618	1233	600	511	6618	86	952	6865	12357	7
					2		3964	4764	1272	619	492	6827	89	701	7083	12747	
					3		4542	5458		709	564	7822	102	803	8114	14605	
					4		4362	5638							8339	15011	
					5	357	4203	5430							8033	14460	
"	"	497	1	2	1	151	4509	4205	1135	545	412	6866	112	930	7063	12713	29
					2		4578	4268	1154	553	401	6970	114	808	7171	12007	
					3		5175	4825		625	453	7880	129	913	8106	14591	
					4		5047	4953							8304	14948	
					5	178	4956	4866							8156	14680	
"	"	572 1	1	3	1	279	3633	4056	2032	593					6200	11160	51
					2		3737	4172	2091	610					6378	11480	
					3		4725	5275		771					8064	14515	
					4		4490	5510							8383	15089	
					5	373	4323	5304							8069	14525	
"	"	572 2	1	3	1	224	4036	4374	1366	627					6736	12125	51
					2		4128	4474	1398	641					6890	12403	
					3		4799	5201		745					8010	14419	
					4		4620	5380							8249	14848	
					5	274	4494	5232							8022	14440	
"	ENOCH	398	1	2	1	290	3724	4970	1016	427	522	6853	104	1078	7051	12690	7
					2		3835	5119	1046	440	505	7058	107	844	7261	13069	
					3		4283	5717		491	564	7883	119	943	8109	14596	
					4		4144	5856							8273	14892	
					5	335	4005	5660							7997	14394	
"	"	399	1	2	1	386	4491	3962	1161	535					6836	12304	27
					2		4671	4121	1208	556					7110	12799	
					3		5313	4687		632					8087	14558	
					4		5187	4813							8292	14925	
					5	457	4950	4593							7912	14241	
"	"	596 A1	1	3	1	456	3853	4355	1326	581					6550	11790	53
					2		4041	4558	1391	609					6870	12366	
					3		4694	5306		707					7980	14364	
					4		4516	5484							8209	14776	
					5	565	4251	5174							7746	13942	
"	"	596 A2	1	3	1	407	3787	4307	1499	535					6461	11631	53
					2		3948	4490	1562	558					6735	12124	
					3		4679	5321		661					7982	14368	
					4		4496	5504							8219	14795	
					5	503	4270	5227							7807	14052	
"	"	596 A3	1	3	1	406	3661	4304	1629	639					6344	11419	53
					2		3816	4486	1698	666					6612	11902	
					3		4596	5404		802					7964	14336	
					4		4377	5623							8240	14832	
					5	515	4151	5334							7816	14069	
"	"	596 A4[10]	1	3	1	357	1624	1342	6667	359					1756	3161	53
					2		1686	1393	6921	373					1823	3281	
					3		5476	4524		1211					5921	10656	
					4		4237	5763							7409	13337	
					5	1410	3640	4950							6366	11458	
"	"	596 A9	1	3	1	428	3782	4323	1467	574					6466	11640	53
					2		3951	4516	1533	600					6755	12160	
					3		4656	5334		709					7978	14362	
					4		4477	5523							8221	14798	
					5	528	4241	5231							7787	14016	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	BTU	Year
		1	2	3	4												
								MEIGS CREEK (CON.)									
NOBLE	ENOCH	596 B1	1	3	1	570	3267	3906	2257	462					5644	10160	53
					2		3465	4142	2393	490					5985	10774	
					3		4565	5445		644					7868	14163	
					4		4307	5693							8186	14734	
					5	780	3970	5250							7548	13586	
"	"	596 B2	1	3	1	911	1204	794	7091	205					1084	1951	53
					2		1325	873	7802	226					1193	2147	
					3		6028	3972		1028					5428	9768	
					4		4211	5789							7796	14032	
					5	4087	2489	3424							4607	8293	
"	"	596 B3	1	3	1	513	3533	3799	2155	340					5778	10401	53
					2		3724	4004	2272	358					6090	10963	
					3		4819	5181		463					7880	14186	
					4		4625	5375							8152	14673	
					5	685	4308	5007							7593	13668	
"	"	596 B9	1	3	1	604	3042	3440	2914	396					5034	9062	53
					2		3238	3661	3101	421					5358	9645	
					3		4693	5307		610					7766	13980	
					4		4395	5605							8165	14697	
					5	910	3995	5095							7422	13359	
"	"	603 A1[11]	1	3	1	293	3851	4299	1557	611	490	6319	99	924	6494	11689	54
					2		3957	4429	1604	629	471	6510	102	684	6690	12042	
					3		4725	5275		749	561	7754	121	815	7968	14343	
					4		4528	5472							8224	14804	
					5	367	4362	5271							7923	14261	
"	"	603 A2[11]	1	3	1	330	3736	4052	1882	390	488	6144	108	988	6248	11247	54
					2		3864	4190	1946	403	467	6354	112	718	6461	11631	
					3		4798	5202		500	580	7889	139	892	8022	14441	
					4		4621	5379							8272	14889	
					5	426	4423	5151							7919	14255	
"	"	603 B1[11]	4	3	1	276	3663	4167	1894	630	465	6014	93	904	6197	11155	54
					2		3757	4285	1948	648	447	6184	96	677	6373	11472	
					3		4678	5322		805	555	7680	119	841	7915	14247	
					4		4446	5554							8214	14786	
					5	363	4284	5353							7916	14248	
"	"	603 B2[11]	4	3	1	285	3486	3798	2431	381	457	5700	100	931	5821	10478	54
					2		3588	3910	2502	392	438	5867	103	698	5992	10785	
					3		4785	5215		523	584	7825	137	931	7991	14384	
					4		4562	5438							8306	14951	
					5	398	4381	5221							7977	14358	
"	JACKSON	397	1	2	1	452	4216	4126	1206	454	512	6608	88	1132	6722	12099	27
					2		4416	4321	1263	475	484	6921	92	765	7040	12672	
					3		5054	4946		544	554	7921	105	876	8058	14504	
					4		4925	5075							8249	14848	
					5	535	4662	4803							7807	14053	
"	"	601 B1	3	3	1	196	4160	4453	1191	532					6916	12449	53
					2		4243	4542	1215	543					7054	12698	
					3		4830	5170		618					8030	14454	
					4		4683	5317							8229	14813	
					5	233	4574	5193							8037	14467	
"	"	601 B2	3	3	1	192	4247	4498	1063	579					7037	12668	53
					2		4330	4586	1084	590					7175	12916	
					3		4856	5144		662					8047	14486	
					4		4712	5288							8244	14840	
					5	225	4606	5169							8059	14506	
"	"	601 B3	3	3	1	216	3625	3958	2191	383					6051	10892	53
					2		3705	4056	2239	391					6185	11132	
					3		4774	5226		504					7969	14343	
					4		4574	5426							8248	14846	
					5	291	4441	5258							8008	14415	
"	"	601 B4	3	3	1	235	4090	5006	669	252					7382	13288	53
					2		4188	5127	685	268					7560	13608	
					3		4496	5504		277					8116	14609	
					4		4420	5580							8212	14782	
					5	257	4307	5436							8001	14402	
"	"	601 B9	3	3	1	224	4044	4552	1200	439	513	6776	105	967	6890	12402	53
					2		4137	4636	1227	449	499	6931	108	786	7048	12686	
					3		4716	5284		512	569	7900	123	896	8034	14460	
					4		4579	5421							8214	14786	
					5	265	4457	5278							7998	14396	
"	"	601 C1	3	3	1	218	4195	4257	1330	563					6782	12209	53
					2		4288	4352	1360	576					6933	12481	
					3		4963	5037		667					8024	14446	
					4		4807	5193							8246	14843	
					5	264	4681	5055							8028	14451	
"	"	601 C2	3	3	1	231	3652	4179	1928	462					6243	11238	53
					2		3749	4278	1973	473					6391	11504	
					3		4670	5330		589					7962	14332	
					4		4471	5529							8227	14808	
					5	301	4336	5363							7979	14363	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
								MEIGS CREEK (CON.)									
NOBLE	JACKSON	601 C3	3	3	1	2.34	39.02	50.71	7.93	3.77					7247	13046	53
					2		39.95	51.93	8.12	3.86					7421	13359	
					3		43.48	56.52		4.20					8077	14540	
					4		42.37	57.63							8208	14775	
					5	2.62	41.27	56.11							7993	14388	
"	"	601 C4	3	3	1	2.48	35.97	46.95	14.60	3.74					6569	11825	53
					2		36.88	48.15	14.97	3.84					6736	12126	
					3		43.37	56.63		4.52					7922	14261	
					4		41.78	58.22							8113	14603	
					5	3.02	40.53	56.45							7868	14162	
"	"	601 C9	3	3	1	2.24	38.51	44.71	14.54	4.59	4.91	65.46	.94	9.56	6624	11923	53
					2		39.39	45.74	14.87	4.70	4.77	66.96	.96	7.74	6776	12196	
					3		46.27	53.73		5.52	5.60	78.66	1.13	9.09	7960	14326	
					4		44.54	55.36							8168	14702	
					5	2.74	43.43	53.83							7944	14300	
"	"	601 D1	3	3	1	2.18	41.38	44.35	12.09	5.60					6861	12350	53
					2		42.30	45.34	12.36	5.72					7014	12625	
					3		48.27	51.73		6.53					8003	14406	
					4		46.73	53.27							8209	14776	
					5	2.60	45.52	51.88							7996	14393	
"	"	601 D2	3	3	1	2.14	39.96	44.27	13.63	5.65					6678	12021	53
					2		40.83	45.24	13.93	5.77					6824	12284	
					3		47.44	52.56		6.70					7928	14272	
					4		45.74	54.26							8149	14668	
					5	2.60	44.56	52.84							7936	14285	
"	"	601 D3	3	3	1	2.12	37.73	42.40	17.75	4.89					6409	11536	53
					2		38.55	43.32	18.13	5.00					6548	11786	
					3		47.09	52.91		6.11					7998	14396	
					4		45.19	54.81							8252	14853	
					5	2.71	43.97	53.32							8028	14450	
"	"	601 D4	3	3	1	2.44	40.05	45.68	11.83	2.95					6969	12545	53
					2		41.05	46.82	12.13	3.02					7143	12859	
					3		46.72	53.28		3.44					8129	14634	
					4		45.60	54.40							8283	14909	
					5	2.85	44.30	52.85							8046	14483	
"	"	601 D9	3	3	1	2.10	39.46	44.02	14.42	4.85	4.97	65.70	.94	9.12	6659	11986	53
					2		40.31	44.96	14.73	4.95	4.84	67.11	.96	7.41	6802	12243	
					3		47.27	52.73		5.80	5.68	78.70	1.13	8.69	7977	14358	
					4		45.66	54.34							8190	14742	
					5	2.57	44.48	52.95							7980	14364	
"	JEFFERSON	584 A	1	1	1	.79	3.60	4.31	1.30	.51	.53	6.29	.09	1.28	6428	11570	52
					2		3.91	4.68	1.41	.55	.48	6.83	.10	.63	6983	12570	
					3		4.56	5.44		.64	.55	7.95	.12	.74	8129	14620	
					4		4.38	5.62							8356	15040	
					5	.95	3.96	5.09							7559	13607	
"	"	584 B1	1	1	1	.32	3.76	4.47	1.45	.48	.50	6.58	.11	.88	6661	11990	52
					2		3.88	4.63	1.49	.50	.48	6.79	.11	.63	6878	12380	
					3		4.56	5.44		.59	.57	7.98	.13	.73	8082	14550	
					4		4.39	5.61							8303	14946	
					5	.39	4.23	5.38							7990	14382	
"	"	584 B2	1	1	1	.34	3.53	4.13	2.00	.40	.48	6.08	.11	.93	6144	11060	52
					2		3.65	4.28	2.07	.41	.46	6.29	.11	.66	6361	11450	
					3		4.60	5.40		.52	.58	7.93	.14	.83	8021	14440	
					4		4.40	5.60							8287	14916	
					5	.45	4.21	5.34							7918	14252	
"	MARION	168	1	1	1	3.57	41.53	44.37	10.53	4.87	5.25	68.15	1.11	10.09	6947	12505	14
					2		43.07	46.01	10.92	5.05	5.03	70.67	1.15	7.18	7204	12967	
					3		48.35	51.65		5.67	5.65	79.33	1.29	8.06	8087	14557	
					4		47.03	52.97							8268	14883	
					5	4.15	45.08	50.77							7926	14266	
"	"	396	1	2	1	3.12	37.36	46.67	12.85	5.60	5.09	65.61	.92	9.93	6739	12130	7
					2		38.56	48.18	13.26	5.78	4.90	67.72	.95	7.39	6956	12521	
					3		44.45	55.55		6.66	5.65	78.07	1.10	8.52	8019	14435	
					4		42.65	57.35							8237	14827	
					5	3.76	41.05	55.19							7928	14270	
"	OLIVE	395	1	2	1	4.36	41.06	41.26	13.32	4.73					6574	11833	27
					2		42.93	43.14	13.93	4.95					6874	12372	
					3		49.88	50.12		5.75					7987	14374	
					4		48.44	51.56							8191	14744	
					5	5.25	45.90	48.85							7761	13970	
"	SENECA	176	1	1	1	4.53	39.56	45.59	10.32	4.12	5.27	68.00	1.17	11.12	6846	12323	14
					2		41.44	47.75	10.81	4.32	5.00	71.22	1.23	7.42	7171	12908	
					3		46.46	53.54		4.84	5.61	79.85	1.38	8.32	8040	14472	
					4		45.20	54.80							8204	14767	
					5	5.23	42.83	51.94							7774	13994	
"	SHARON	498	1	2	1	2.00	42.75	43.20	12.05	5.03					6935	12483	29
					2		43.62	44.08	12.30	5.13					7075	12735	
					3		49.74	50.26		5.85					8067	14521	
					4		48.38	51.62							8263	14874	
					5	2.57	47.23	50.40							8068	14523	

County	Township	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B t u	
									MEIGS CREEK (CON.)								
NOBLE	STOCK	288	1	2	1	2.55	38.40	47.64	11.41	5.79	5.11	67.50	.92	4.27	6952	12514	7
					2		39.40	48.89	11.71	5.94	4.96	69.26	.94	7.19	7134	12841	
					3		44.63	55.37		6.73	5.62	78.45	1.06	8.14	8080	14544	
					4		42.92	57.08							8288	14918	
					5	3.02	41.62	55.36							8038	14468	
"	"	394	1	2	1	4.08	43.49	41.56	10.87	5.39	5.19	66.70	1.02	10.83	6831	12296	27
					2		45.34	43.33	11.33	5.62	4.95	69.54	1.06	7.50	7122	12820	
					3		51.13	48.87		6.34	5.58	78.42	1.20	8.46	8032	14458	
					4		49.82	50.18							8227	14809	
					5	4.78	47.44	47.78							7833	14100	
WASHINGTON	ADAMS	287	1	2	1	2.95	37.47	46.69	12.89	5.55	5.05	65.88	.92	9.71	6803	12245	4
					2		38.61	48.11	13.28	5.72	4.86	67.88	.95	7.31	7010	12617	
					3		44.62	55.48		6.60	5.60	78.27	1.10	8.43	8083	14549	
					4		42.73	57.27							8303	14945	
					5	3.55	41.22	55.23							8008	14414	
"	"	496	1	2	1	2.72	41.16	44.57	11.55	4.48	6.83	67.07	1.04	9.03	6850	12330	29
					2		42.31	45.82	11.87	4.61	6.71	68.95	1.07	6.79	7042	12675	
					3		48.01	51.99		5.23	7.61	78.25	1.21	7.70	7990	14382	
					4		46.68	53.32							8168	14702	
					5	3.20	45.19	51.61							7907	14232	
"	AURELIUS	286	1	2	1	3.40	37.95	49.07	9.58	5.03	5.31	68.33	.90	10.85	7083	12749	7
					2		39.28	50.80	9.92	5.21	5.10	70.73	.93	8.11	7332	13198	
					3		43.61	56.39		5.78	5.66	78.53	1.03	9.00	8139	14651	
					4		42.12	57.88							8317	14970	
					5	3.91	40.48	55.61							7991	14384	
									FISHPOT								
BELMONT	MEAD	351	2	2	1	2.54	40.81	40.92	15.73	5.00					6522	11739	26
					2		41.87	41.99	16.14	5.13					6692	12045	
					3		49.93	50.07		6.12					7980	14363	
					4		48.31	51.69							8212	14782	
					5	3.16	46.79	50.05							7952	14314	
MONROE	MALAGA	350	1	2	1	5.16	37.73	37.49	19.62	5.19	5.02	59.61	.95	9.61	6068	10922	27
					2		39.78	39.53	20.69	5.48	4.70	62.85	1.00	5.28	6398	11516	
					3		50.16	49.84		6.91	5.93	79.24	1.26	6.66	8067	14520	
					4		48.14	51.86							8367	15061	
					5	6.79	44.88	48.33							7799	14038	
									REDSTONE								
GALLIA	CHESHIRE	237	1	2	1	8.21	34.23	46.10	11.46	2.18	5.48	62.95	1.02	16.91	6387	11497	7
					2		37.29	50.22	12.49	2.37	4.98	68.58	1.11	10.47	6958	12524	
					3		42.61	57.39		2.71	5.69	78.37	1.27	11.96	7951	14312	
					4		41.48	58.52							8088	14559	
					5	9.60	37.54	52.96							7321	13177	
MEIGS	BEDFORD	236	1	2	1	7.02	39.70	42.87	10.41	6.16					6463	11634	28
					2		42.70	46.11	11.19	6.63					6951	12512	
					3		48.08	51.92		7.47					7827	14089	
					4		46.46	53.54							8030	14454	
					5	8.22	42.65	49.13							7371	13267	
"	RUTLAND	234	1	2	1	7.63	33.33	48.11	10.93	1.83	5.20	65.29	1.03	15.72	6512	11722	7
					2		36.08	52.09	11.83	1.98	4.71	70.68	1.12	9.68	7050	12690	
					3		40.92	59.08		2.25	5.34	80.16	1.27	10.98	7996	14393	
					4		39.87	60.13							8121	14618	
					5	8.75	36.39	54.86							7411	13339	
"	SALISBURY	197	1	2	1	5.51	38.19	45.72	10.58	4.17	5.40	65.55	.95	13.35	6661	11990	7
					2		40.42	48.38	11.20	4.41	5.07	69.37	1.01	8.94	7049	12688	
					3		45.52	54.48		4.97	5.71	78.11	1.14	10.07	7938	14288	
					4		44.17	55.83							8103	14586	
					5	6.39	41.34	52.27							7586	13655	
"	"	230	1	2	1	7.22	32.82	50.67	9.29	1.32	5.39	66.47	1.10	16.43	6668	12002	7
					2		35.38	54.61	10.01	1.42	4.95	71.64	1.19	10.79	7187	12936	
					3		39.32	60.68		1.58	5.50	79.61	1.32	11.99	7986	14375	
					4		38.47	61.53							8084	14552	
					5	8.09	35.35	56.56							7431	13375	
"	"	231	1	2	1	7.33	34.59	49.39	8.69	2.05	5.53	66.71	1.06	15.96	6725	12105	7
					2		37.32	53.30	9.38	2.21	5.09	71.99	1.14	10.19	7257	13062	
					3		41.18	58.82		2.44	5.62	79.44	1.26	11.24	8008	14414	
					4		40.25	59.75							8116	14609	
					5	8.19	36.96	54.85							7452	13413	
"	"	232	1	2	1	6.05	41.96	43.76	8.23	2.61					6857	12342	28
					2		44.66	46.58	8.76	2.78					7298	13136	
					3		48.95	51.05		3.05					7999	14397	
					4		48.14	51.86							8112	14602	
					5	6.75	44.89	48.36							7565	13617	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
						REDSTONE (CON.)											
MEIGS	SUTTON	235		1	2	1	4.85	36.28	46.35	12.52	2.94	5.32	65.29	1.17	12.76	6624	11923	7
						2		38.13	48.71	13.16	3.09	5.02	68.62	1.23	8.88	6962	12531	
						3		43.91	56.09		3.56	5.78	79.01	1.42	10.23	8017	14430	
						4		42.62	57.38							8177	14719	
						5	5.72	40.18	54.10							7709	13877	
						PITTSBURGH											
ATHENS	ALEXANDER	188		1	2	1	7.13	41.51	42.09	9.27	4.52	5.40	64.40	.96	15.45	6559	11807	28
						2		44.70	45.32	9.98	4.87	4.97	69.34	1.03	9.81	7062	12713	
						3		49.66	50.34		5.41	5.52	77.03	1.14	10.90	7846	14122	
						4		48.48	51.52							8004	14408	
						5	8.15	44.52	47.33							7353	13235	
"	BERN	277	1	1	2	1	6.50	35.05	48.15	10.20	3.41	5.13	66.61	.93	13.72	6607	11893	7
						2		37.53	51.55	10.92	3.65	4.71	71.32	1.00	8.40	7074	12733	
						3		42.13	57.87		4.10	5.29	80.06	1.12	9.43	7941	14293	
						4		40.83	59.17							8088	14559	
						5	7.58	37.73	54.69							7476	13457	
"	"	277	2	1	2	1	4.51	38.24	45.76	11.49	4.88	5.10	65.92	.99	11.62	6636	11945	7
						2		40.05	47.92	12.03	5.11	4.82	69.03	1.04	7.97	6949	12508	
						3		45.53	54.47		5.81	5.48	78.47	1.18	9.06	7899	14218	
						4		44.00	56.00							8084	14552	
						5	5.31	41.66	53.03							7656	13780	
"	"	278	1	1	2	1	5.94	40.15	45.26	8.55	3.35	5.32	67.82	1.28	13.58	6774	12194	28
						2		42.68	48.12	9.20	3.56	4.96	72.10	1.36	8.82	7202	12964	
						3		47.00	53.00		3.92	5.46	79.41	1.50	9.71	7932	14277	
						4		45.99	54.01							8062	14512	
						5	6.59	42.92	50.39							7522	13540	
"	"	278	2	1	2	1	5.66	43.96	43.52	6.86	4.10	5.46	68.25	1.08	14.25	6939	12491	28
						2		46.60	46.13	7.27	4.35	5.12	72.34	1.14	9.78	7355	13240	
						3		50.25	49.75		4.69	5.52	78.01	1.23	10.55	7932	14278	
						4		49.33	50.67							8060	14508	
						5	6.27	46.24	47.49							7556	13600	
"	"	279	A	1	2	1	5.78	37.43	48.79	8.00	4.19	5.14	67.55	.95	14.17	6833	12299	7
						2		39.73	51.78	8.49	4.45	4.78	71.69	1.01	.58	7252	13053	
						3		43.42	56.58		4.86	5.22	78.35	1.10	10.47	7925	14264	
						4		42.17	57.83							8064	14516	
						5	6.49	39.43	54.08							7542	13575	
"	"	279	B	1	2	1	3.62	44.84	44.69	6.85	3.74					6980	12564	29
						2		46.52	46.37	7.11	3.88					7242	13036	
						3		50.08	49.92		4.18					7796	14033	
						4		49.23	50.77							7911	14239	
						5	4.00	47.26	48.74							7594	13669	
"	"	279	C	1	2	1	3.70	43.85	44.61	7.84	4.24					6949	12508	29
						2		45.53	46.33	8.14	4.40					7216	12989	
						3		49.56	50.44		4.79					7855	14139	
						4		48.56	51.44							7989	14381	
						5	4.15	46.55	49.30							7658	13784	
"	"	281	1	1	2	1	5.87	41.93	43.39	8.81	4.01	5.35	67.06	1.05	13.72	6806	12251	28
						2		44.54	46.10	9.36	4.26	5.00	71.24	1.12	9.02	7230	13015	
						3		49.14	50.86		4.70	5.52	78.59	1.24	9.95	7977	14359	
						4		48.07	51.93							8133	14622	
						5	6.55	44.88	48.47							7583	13650	
"	"	281	2	1	2	1	6.31	43.16	42.95	7.58	3.75	5.49	67.28	1.52	14.38	6879	12383	28
						2		46.07	45.84	8.09	4.00	5.11	71.81	1.62	9.37	7342	13217	
						3		50.13	49.87		4.35	5.56	78.14	1.76	10.19	7988	14380	
						4		49.20	50.80							8119	14615	
						5	7.03	45.74	47.23							7549	13588	
"	"	583	$1^{12}1$	3		1	.72	47.48	.401	47.79	6.49					1783	3209	52
						2		47.82	.404	48.14	6.54					1796	3232	
						3		92.21	7.79		12.61					3463	6232	
						4		93.11	6.89							3634	6541	
						5	1.61	91.61	6.78							3576	6436	
"		583	$2^{12}1$	3		1	1.53	28.21	25.54	44.72	2.48					4068	7322	52
						2		28.65	25.94	45.41	2.52					4131	7436	
						3		52.48	47.52		4.62					7567	13622	
						4		48.43	51.57							8192	14746	
						5	3.04	46.96	50.00							7944	14299	
"	"	583	$3^{12}1$	3		1	1.77	43.19	44.34	10.70	6.31					6934	12482	52
						2		43.97	45.14	10.89	6.42					7059	12707	
						3		49.34	50.66		7.20					7922	14260	
						4		47.85	52.12							8123	14622	
						5	2.08	46.85	51.07							7954	14318	
"	"	605	1	1	3	1	5.80	38.04	43.83	12.33	6.54					6344	11419	54
						2		40.38	46.53	13.09	6.94					6735	12122	
						3		46.46	53.54		7.99					7749	13948	
						4		44.56	55.44							7973	14352	
						5	6.98	41.45	51.57							7417	13350	

County	Township	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B t u	
									PITTSBURGH (CON.)								
ATHENS	BERN	605 2	1	3	1	651	3783	4399	1167	632					6307	11354	54
					2		4047	4705	1248	676					6746	12145	
					3		4624	5376		772					7708	13877	
					4		4440	5560							7922	14259	
					5	776	4095	5129							7307	13153	
"	CANAAN	275	1	2	1	737	3902	4253	1108	420					6407	11533	28
					2		4212	4592	1196	454					6917	12451	
					3		4784	5216		516					7857	14142	
					4		4662	5348							8028	14451	
					5	860	4252	4888							7338	13208	
"	LODI	274 1	1	2	1	852	3915	4244	989	306	541	6419	160	1585	6442	11595	28
					2		4279	4640	1081	334	487	7017	175	906	7042	12675	
					3		4798	5202		374	546	7868	196	1016	7896	14211	
					4		4693	5307							8034	14462	
					5	972	4238	4790							7253	13056	
"	"	274 2	1	2	1	673	4120	4099	1108	278	534	6457	113	1510	6500	11700	28
					2		4417	4395	1188	298	492	6923	121	978	6969	12544	
					3		5012	4988		338	558	7857	137	1110	7909	14235	
					4		4914	5086							8051	14492	
					5	778	4532	4690							7425	13365	
BELMONT	COLERAIN	273	1	2	1	379	3637	5084	900	416	514	7041	109	1020	7145	12861	7
					2		3780	5284	936	432	491	7318	113	710	7426	13367	
					3		4170	5830		477	542	8073	125	783	8193	14747	
					4		4036	5964							8348	15027	
					5	431	3862	5707							7989	14380	
"	FLUSHING	272	1	2	1	423	3634	5022	921	417	514	6875	109	1164	7003	12605	7
					2		3794	5244	952	435	488	7178	114	823	7312	13162	
					3		4198	5802		481	540	7942	126	911	8090	14563	
					4		4062	5938							8246	14842	
					5	482	3867	5651							7848	14126	
"	"	574	1	1	1	19	392	495	94	47					7194	12950	23
					2		399	505	96	48					7328	13190	
					3		441	559		53					8106	14591	
					4		428	578							8270	14886	
					5	22	419	559							8095	14571	
"	KIRKWOOD	271	1	2	1	375	3799	4742	1084	476	509	6741	111	1079	6865	12357	7
					2		3947	4927	1126	495	485	7004	115	775	7132	12838	
					3		4448	5552		558	547	7892	130	873	8037	14467	
					4		4299	5701							8218	14792	
					5	438	4110	5452							7858	14145	
"	MEAD	270 A	1	2	1	291	3794	5115	800	431	511	7295	104	859	7340	13212	7
					2		3908	5268	824	444	493	7513	107	619	7560	13608	
					3		4269	5741		484	537	8187	117	675	8239	14830	
					4		4133	5867							8388	15098	
					5	327	3998	5675							8114	14605	
"	"	270 B	1	2	1	184	3898	4654	1254	482					7005	12609	5
					2		3971	4751	1278	491					7136	12845	
					3		4553	5447		563					8182	14727	
					4		4398	5602							8383	15090	
					5	220	4301	5479							8199	14758	
"	PEASE	158 A	1	1	1	40	396	483	81	34					7222	13000	20
					2		413	503	84	35					7523	13541	
					3		451	549		38					8213	14783	
					4		441	559							8343	15017	
					5	45	420	535							7974	14354	
"	"	158 B	1	1	1	39	389	480	92	36					7144	12860	20
					2		405	499	96	37					7434	13381	
					3		448	552		41					8223	14802	
					4		437	563							8369	15064	
					5	44	417	539							7997	14395	
"	"	158 C	1	1	1	39	387	493	81	33					7244	13040	20
					2		403	513	84	34					7538	13569	
					3		440	560		37					8229	14813	
					4		430	570							8358	15045	
					5	44	410	546							7998	14396	
"	"	158 K	1	1	1	39	396	480	85	34	53	712	13	103	7200	12960	20
					2		415	499	89	36	50	741	14	70	7494	13490	
					3		452	548		39	55	813	15	78	8222	14800	
					4		442	558							8362	15051	
					5	44	422	534							7988	14379	
"	"	269	1	2	1	339	3684	5191	786	297	521	7145	124	1127	7217	12991	7
					2		3813	5373	814	307	501	7395	128	855	7470	13446	
					3		4151	5849		334	545	8051	139	931	8132	14637	
					4		4049	5951							8249	14849	
					5	377	3897	5786							7938	14289	
"	PULTNEY	160 A	1	1	1	399	3877	4917	807	349					7279	13102	5
					2		4038	5122	840	364					7882	13648	
					3		4408	5592		397					8277	14900	
					4		4302	5698							8413	15143	
					5	446	4110	5444							8037	14466	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
								PITTSBURGH (CON.)									
BELMONT	PULTNEY	160 B	1	1	1	4.06	39.45	50.05	6.44	3.35							5
					2		41.12	52.17	6.71	3.49							
					3		44.08	55.92		3.74							
					4		43.14	56.86									
					5	4.45	41.22	54.33									
"	"	268	1	2	1	3.80	37.18	50.07	8.95	4.27	5.23	70.57	1.20	9.78	7103	12785	7
					2		38.65	52.05	9.30	4.44	5.00	73.36	1.25	6.65	7383	13289	
					3		42.61	57.39		4.90	5.51	80.88	1.38	7.33	8140	14652	
					4		41.28	58.72							8295	14931	
					5	4.32	39.50	56.18							7938	14288	
"	"	575 A	1	1	1	3.32	40.80	49.11	6.77	3.55							6
					2		42.20	50.80	7.00	3.67							
					3		45.38	54.62		3.95							
					4		44.43	55.57									
					5	3.66	42.80	53.54									
"	"	575 B	1	1	1	3.10	40.76	50.11	6.03	3.42					7553	13595	6
					2		42.06	51.72	6.22	3.53					7795	14031	
					3		44.85	55.15		3.76					8312	14962	
					4		43.96	56.04							8427	15168	
					5	3.38	42.48	54.14							8141	14654	
"	"	575 C	1	2	1	3.51	38.65	50.98	6.86	3.76	5.45	72.06	1.17	10.70	7325	13185	7
					2		40.06	52.83	7.11	3.90	5.24	74.68	1.21	7.86	7591	13664	
					3		43.13	56.87		4.20	5.64	80.40	1.30	8.46	8172	14709	
					4		42.06	57.94							8298	14936	
					5	3.88	40.43	55.69							7977	14358	
"	RICHLAND	500 A	1	1	1	3.3	38.5	49.6	8.6	3.3					7239	13030	40
					2		39.8	51.3	8.9	3.4					7483	13470	
					3		43.7	56.3		3.7					8217	14790	
					4		42.6	57.4							8350	15030	
					5	3.7	41.1	55.2							8039	14470	
"	"	500 B	1	1	1	3.2	38.7	47.9	10.2	3.6					7100	12780	40
					2		40.0	49.5	10.5	3.7					7339	13210	
					3		44.7	55.3		4.1					8200	14760	
					4		43.4	56.6							8356	15040	
					5	3.7	41.9	54.4							8044	14480	
"	"	500 C	1	1	1	3.5	37.5	48.3	10.6	3.3					7050	12690	40
					2		38.9	50.1	11.0	3.4					7317	13170	
					3		43.7	56.3		3.8					8217	14790	
					4		42.5	57.5							8372	15070	
					5	4.2	40.7	55.1							8022	14440	
"	SMITH	265	1	2	1	6.00	41.19	43.99	8.82	4.32	5.76	69.02	1.16	10.92	6990	12583	27
					2		43.82	46.80	9.38	4.60	5.42	73.42	1.23	5.95	7436	13386	
					3		48.36	51.64		5.08	5.98	81.01	1.36	6.57	8206	14772	
					4		47.21	52.79							8368	15063	
					5	6.81	43.99	49.20							7799	14038	
"	"	266	1	2	1	3.21	36.82	52.71	7.26	4.28	5.14	71.49	1.06	10.77	7297	13135	7
					2		38.04	54.46	7.50	4.42	4.95	73.86	1.09	8.18	7539	13570	
					3		41.12	58.88		4.78	5.35	79.85	1.18	8.84	8150	14670	
					4		39.87	60.13							8289	14920	
					5	3.57	38.45	57.98							7993	14388	
"	SOMERSET	264 A	1	2	1	4.08	37.08	48.23	10.61	4.95	4.89	68.77	1.10	9.68	6931	12476	7
					2		38.66	50.28	11.06	5.16	4.63	71.69	1.15	6.31	7226	13006	
					3		43.47	56.53		5.80	5.21	80.61	1.29	7.09	8125	14623	
					4		41.91	58.09							8311	14959	
					5	4.75	39.92	55.33							7916	14249	
"	"	264 B	1	1	1	3.72	41.01	45.78	9.49	4.57					7089	12760	14
					2		42.59	47.55	9.86	4.75					7363	13253	
					3		47.25	52.75		5.27					8168	14703	
					4		46.00	54.00							8336	15005	
					5	4.26	44.05	51.69							7981	14365	
"	UNION	262	1	2	1	4.46	36.00	48.78	10.76	4.45	4.85	68.24	1.10	10.60	6903	12425	7
					2		37.68	51.06	11.26	4.66	4.56	71.42	1.15	6.95	7225	13005	
					3		42.46	57.54		5.25	5.14	80.48	1.30	7.83	8142	14655	
					4		40.94	59.06							8321	14977	
					5	5.19	38.82	55.99							7889	14200	
"	"	263	1	2	1	4.22	41.86	44.00	9.92	4.56					6973	12551	27
					2		43.70	45.94	10.36	4.76					7280	13104	
					3		48.75	51.25		5.31					8121	14618	
					4		47.53	52.47							8293	14927	
					5	4.86	45.22	49.92							7889	14201	
"	WARREN	151 A	1	1	1	4.13	42.71	43.83	9.33	4.46					7074	12733	14
					2		44.55	45.72	9.73	4.65					7379	13282	
					3		49.35	50.65		5.15					8174	14714	
					4		48.21	51.79							8339	15011	
					5	4.72	45.94	49.34							7946	14302	
"	"	151 B	1	1	1	3.72	43.25	44.40	8.63	4.45					7193	12947	14
					2		44.92	46.12	8.96	4.62					7471	13447	
					3		49.34	50.66		5.07					8206	14770	
					4		48.25	51.75							8364	15055	
					5	4.22	46.21	49.57							8012	14422	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B t u	Year
								PITTSBURGH (CON.)									
BELMONT	WARREN	151 K	1	1	1	388	4309	4396	907	436	546	6997	127	987	7132	12838	14
					2		4483	4573	944	454	523	7280	132	667	7420	13356	
					3		4950	5050		501	578	8038	146	737	8193	14748	
					4		4840	5160							8354	15038	
					5	442	4626	4932							7985	14373	
"	"	261	1	2	1	447	3753	4699	1101	467	517	6764	108	1043	6875	12375	7
					2		3929	4919	1152	489	490	7080	113	676	7196	12953	
					3		4441	5559		553	554	8001	128	764	8133	14639	
					4		4290	5710							8319	14974	
					5	523	4056	5411							7886	14194	
"	WASHINGTON	260	1	2	1	279	3788	4991	942	509	525	6976	109	939	7215	12987	7
					2		3897	5134	969	524	508	7176	112	711	7422	13360	
					3		4315	5685		580	563	7946	124	787	8218	14793	
					4		4166	5834							8397	15115	
					5	321	4032	5647							8128	14631	
"	WHEELING	150 A	1	1	1	396	3809	4891	904	425							6
					2		3965	5094	941	443							
					3		4377	5623		489							
					4		4248	5752									
					5	451	4057	5492									
"	"	150 B	1	1	1	413	3922	4869	796	415					7271	13088	6
					2		4091	5079	830	430					7584	13651	
					3		4461	5539		469					8270	14887	
					4		4345	5655							8418	15153	
					5	463	4143	5394							8029	14453	
"	"	259[13]	1	2	1	425	3353	5187	1035	395	519	6817	109	1125	6903	12425	7
					2		3502	5417	1081	413	493	7119	114	780	7209	12976	
					3		3926	6074		463	553	7981	128	875	8083	14549	
					4		3777	6223							8244	14839	
					5	490	3592	5918							7839	14111	
"	YORK	257	1	2	1	311	4181	4774	734	345					7306	13152	27
					2		4315	4928	757	356					7540	13574	
					3		4668	5332		385					8158	14686	
					4		4576	5424							8282	14907	
					5	345	4418	5237							7997	14394	
"	"	258	1	2	1	226	4263	4843	668	318	520	7424	140	930	7456	13421	27
					2		4362	4955	683	326	506	7595	143	747	7628	13731	
					3		4682	5318		350	543	8152	153	802	8187	14738	
					4		4599	5401							8299	14938	
					5	248	4485	5267							8093	14568	
GALLIA	GREEN	256	1	2	1	673	3434	4590	1303	437	511	6230	114	1405	6356	11441	7
					2		3682	4921	1397	468	468	6680	122	865	6814	12266	
					3		4280	5720		544	544	7765	142	1005	7920	14258	
					4		4109	5891							8118	14613	
					5	806	3777	5417							7464	13436	
"	HARRISON	254	1	2	1	783	3415	4826	976	389	518	6459	109	1549	6544	11779	7
					2		3705	5236	1059	422	468	7007	118	926	7099	12778	
					3		4144	5856		472	523	7837	132	1036	7940	14291	
					4		4002	5998							8096	14572	
					5	897	3643	5460							7371	13267	
"	"	255	1	2	1	698	3614	4785	903	521	524	6491	101	1460	6583	11849	7
					2		3885	5144	971	560	481	6977	108	903	7076	12737	
					3		4303	5697		620	533	7727	120	1000	7837	14107	
					4		4146	5854							8007	14412	
					5	799	3814	5387							7368	13262	
"	OHIO	253	1	2	1	580	3676	4738	1006	434	516	6494	110	1440	6551	11792	7
					2		3902	5030	1068	460	480	6894	117	981	6954	12517	
					3		4369	5631		515	537	7719	131	1098	7785	14014	
					4		4227	5773							7943	14298	
					5	669	3944	5387							7413	13343	
GUERNSEY	MILLWOOD	173 A	1	1	1	45	406	466	83	46	54	703	11	103	7111	12800	27
					2		425	488	87	49	52	736	12	64	7444	13400	
					3		465	535		53	57	807	13	70	8156	14680	
					4		454	546							8311	14960	
					5	51	430	519							7889	14200	
"	"	173 B	1	1	1	47	404	463	86	42					7072	12730	27
					2		424	485	91	44					7422	13360	
					3		466	534		49					8167	14700	
					4		454	546							8311	14960	
					5	53	430	517							7867	14160	
"	"	173 C	1	1	1	39	398	468	95	49	52	699	12	93	7028	12650	27
					2		415	486	99	51	50	727	12	61	7311	13160	
					3		460	540		56	55	807	14	68	8117	14610	
					4		446	554							8289	14920	
					5	45	426	529							7917	14250	
"	"	173 K	1	1	1	43	403	465	89	46	55	729	12	69	7072	12730	27
					2		421	486	93	48	52	761	13	33	7389	13300	
					3		464	536		53	58	840	14	35	8150	14670	
					4		452	548							8311	14960	
					5	490	430	521							7906	14230	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
								PITTSBURGH (CON.)									
GUERNSEY	MILLWOOD	174	1	1	1	4.36	41.14	45.76	8.74	4.85	5.37	69.30	1.26	10.48	7061	12710	14
					2		43.02	47.84	9.14	5.07	5.11	72.46	1.32	6.90	7383	13289	
					3		47.35	52.65		5.58	5.62	79.76	1.45	7.59	8126	14626	
					4		46.10	53.90							8292	14925	
					5	4.96	43.80	51.24							7881	14185	
HARRISON	ATHENS	252	1	2	1	5.98	34.35	53.70	5.97	1.35	5.44	72.22	1.31	13.71	7202	12964	7
					2		36.53	57.12	6.35	1.44	5.08	76.81	1.39	8.93	7660	13788	
					3		39.01	60.99		1.54	5.42	82.02	1.48	9.54	8179	14723	
					4		38.38	61.62							8251	14852	
					5	6.44	35.92	57.64							7720	13896	
"	CADIZ	251	1	2	1	3.83	36.70	48.59	10.88	4.38	5.09	67.70	1.27	10.68	6864	12355	7
					2		38.16	50.53	11.31	4.55	4.85	70.40	1.32	7.57	7137	12847	
					3		43.03	56.97		5.13	5.47	79.37	1.49	8.54	8047	14485	
					4		41.55	58.45							8221	14797	
					5	4.46	39.70	55.84							7854	14138	
"	GERMAN	118	1	1	1	3.6	39.5	49.2	7.7	3.8	5.4	71.7	1.4	10.0	7206	12970	38
					2		40.9	51.1	8.0	3.9	5.2	74.4	1.4	7.1	7472	13450	
					3		44.5	55.5		4.2	5.7	80.9	1.6	7.6	8117	14610	
					4		43.5	56.5							8256	14860	
					5	4.0	41.7	54.3							7922	14260	
"	SHORT CREEK	249[5]	1	2	1	6.54	35.48	51.24	6.74	2.19	5.70	70.49	1.22	13.66	7061	12710	7
					2		37.96	54.83	7.21	2.34	5.32	75.42	1.31	8.40	7555	13599	
					3		40.91	59.09		2.52	5.73	81.29	1.41	9.05	8142	14656	
					4		40.08	59.92							8237	14827	
					5	7.15	37.22	55.63							7649	13769	
"	"	250	1	2	1	4.18	36.95	50.55	8.22	2.83	5.36	71.20	1.26	11.13	7160	12888	7
					2		38.56	52.86	8.58	2.95	5.11	74.31	1.31	7.74	7472	13450	
					3		42.18	57.82		3.23	5.59	81.28	1.43	8.47	8173	14712	
					4		41.18	58.82							8293	14928	
					5	4.67	39.25	56.08							7906	14231	
JEFFERSON	CROSS CREEK	190	1	1	1	5.19	34.69	50.67	9.45	2.38							4
					2		36.59	53.44	9.97	2.61							
					3		40.64	59.36		2.79							
					4		39.60	60.40									
					5	5.87	37.27	56.86									
"	KNOX	121	1	1	1	3.37	37.86	48.78	9.99	3.94					7178	12920	16
					2		39.17	50.49	10.34	4.08					7429	13372	
					3		43.69	56.31		4.55					8286	14914	
					4		42.40	57.60							8449	15208	
					5	3.87	40.77	55.36							8121	14617	
"	"	186	1	1	1	3.18	38.11	49.35	9.36	4.02					7187	12937	16
					2		39.36	50.97	9.67	4.15					7423	13361	
					3		43.67	56.43		4.59					8218	14791	
					4		42.31	57.69							8373	15072	
					5	3.63	40.77	55.60							8070	14526	
"	MT. PLEASANT	248	1	2	1	3.10	37.92	49.46	9.52	3.83	5.22	69.56	1.10	10.77	7153	12875	7
					2		39.13	51.04	9.83	3.95	5.04	71.78	1.13	8.27	7382	13287	
					3		43.40	56.60		4.38	5.59	79.61	1.25	9.17	8187	14735	
					4		42.15	57.85							8338	15009	
					5	3.64	40.56	55.80							8043	14477	
"	"	604 A[14]	1	3	1	1.88	37.22	46.85	14.05	3.17					6835	12304	54
					2		37.93	47.75	14.32	3.23					6966	12540	
					3		44.27	55.73		3.77					8130	14636	
					4		42.89	57.11							8309	14957	
					5	2.26	41.92	55.82							8122	14619	
"	"	604 B[15]	1	3	1	4.66	36.67	47.81	10.96	2.83					6831	12296	54
					2		38.42	50.10	11.48	2.97					7157	12883	
					3		43.40	56.60		3.36					8085	14554	
					4		42.24	57.76							8229	14813	
					5	5.27	40.02	54.71							7797	14034	
"	SMITHFIELD	162	1	1	1	5.45	35.73	54.22	4.60	.84					7401	13322	13
					2		37.79	57.35	4.86	.89					7827	14089	
					3		39.72	60.28		.94					8227	14809	
					4		39.30	60.70							8277	14899	
					5	5.76	37.04	57.20							7802	14043	
"	"	163	1	2	1	4.96	34.51	54.08	6.45	1.75	5.37	72.43	1.33	12.67	7277	13099	7
					2		36.31	56.90	6.79	1.84	5.07	76.21	1.40	8.69	7656	13781	
					3		38.96	61.04		1.97	5.44	81.77	1.50	9.32	8214	14785	
					4		38.22	61.78							8297	14935	
					5	5.39	36.16	58.45							7851	14132	
"	"	192	1	1	1	4.87	36.63	51.25	7.25	2.60	5.36	71.91	1.38	11.50	7218	12992	13
					2		38.51	53.87	7.62	2.73	5.07	75.59	1.45	7.54	7588	13658	
					3		41.69	58.31		2.96	5.49	81.82	1.57	8.16	8214	14785	
					4		40.78	59.22							8322	14979	
					5	5.37	38.58	56.05							7875	14175	
"	"	193	1	1	1	5.47	35.77	53.28	5.48	.77					7324	13183	13
					2		37.84	56.56	5.80	.81					7748	13946	
					3		40.17	59.83		.86					8225	14805	
					4		39.72	60.28							8281	14906	
					5	5.84	37.40	56.76							7797	14035	

County	Township	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
									PITTSBURGH (CON.)								
JEFFERSON	SMITHFIELD	246	1	2	1	430	3528	5254	788	301	518	7134	120	1139	7144	12859	7
					2		3687	5490	823	315	491	7455	125	791	7465	13437	
					3		4018	5982		343	535	8124	136	862	8134	14642	
					4		3910	6090							8254	14858	
					5	479	3723	5798							7859	14147	
"	"	573 A	1	1	1	406	3849	4970	775	367					7304	13147	5
					2		4012	5180	808	382					7613	13703	
					3		4365	5635		416					8282	14908	
					4		4265	5745							8418	15153	
					5	453	4062	5485							8037	14466	
"	"	573 B	1	1	1	420	3716	5113	751	322							5
					2		3879	5337	784	336							
					3		4209	5791		365							
					4		4105	5895									
					5	456	3914	5620									
"	STEUBENVILLE	179	1	1	1	655	3448	5036	861	252							4
					2		3690	5389	921	270							
					3		4064	5936		297							
					4		3961	6059									
					5	733	3671	5596									
"	WARREN	159 A	1	1	1	459	3557	5373	601	154					7403	13325	5
					2		3732	5637	631	162					7767	13981	
					3		3983	6017		173					8290	14923	
					4		3919	6081							8367	15061	
					5	506	3720	5774							7943	14297	
"	"	159 B	1	1	1	499	3533	5398	570	95							5
					2		3718	5682	600	100							
					3		3955	6045		106							
					4		3904	6096									
					5	535	3696	5769									
"	"	244	1	2	1	313	3788	5077	822	402	538	7103	126	1099	7233	13019	7
					2		3910	5241	849	415	519	7332	130	755	7466	13439	
					3		4273	5727		454	567	8012	142	825	8159	14686	
					4		4151	5849							8302	14943	
					5	352	4006	5642							8009	14417	
"	"	245	1	2	1	457	3240	5403	900	165	506	7118	132	1189	7105	12789	7
					2		3395	5662	943	162	477	7459	138	821	7445	13401	
					3		3748	6252		179	527	8236	152	906	8220	14796	
					4		3660	6340							8322	14979	
					5	511	3473	6016							7897	14214	
"	WAYNE	191 A	1	1	1	501	3615	5283	601	174					7327	13189	12
					2		3806	5551	633	183					7713	13883	
					3		4063	5937		195					8234	14821	
					4		3996	6004							8314	14965	
					5	541	3779	5680							7864	14156	
"	"	191 B	1	1	1	432	3709	4914	945	382					7072	12730	12
					2		3876	5136	988	399					7391	13304	
					3		4301	5699		443					8201	14763	
					4		4174	5826							8355	15039	
					5	493	3969	5538							7944	14299	
"	"	191 K	1	1	1	470	3660	5081	789	280	528	7172	135	1096	7195	12950	12
					2		3840	5332	828	294	499	7523	142	714	7545	13580	
					3		4188	5812		320	544	8204	154	778	8228	14809	
					4		4088	5912							8344	15019	
					5	523	3874	5603							7913	14243	
"	"	243	1	2	1	505	3588	5112	795	261	532	7068	125	1219	7147	12865	7
					2		3779	5384	837	275	501	7444	132	811	7527	13549	
					3		4124	5876		300	547	8124	144	885	8215	14787	
					4		4027	5973							8330	14994	
					5	561	3801	5638							7863	14153	
"	WELLS	180 A	1	1	1	379	3878	5003	740	384					7267	13081	13
					2		4031	5200	769	399					7553	13595	
					3		4367	5633		432					8182	14728	
					4		4257	5743							8315	14967	
					5	422	4077	5501							7966	14338	
"	"	180 B	1	1	1	428	3741	5029	802	372					7201	12962	13
					2		3908	5254	838	389					7523	13541	
					3		4265	5735		425					8211	14780	
					4		4150	5850							8349	15028	
					5	479	3951	5570							7949	14308	
"	"	180 K	1	1	1	411	3796	5023	770	384	523	7169	139	1015	7230	13014	13
					2		3959	5238	803	400	497	7477	145	678	7540	13572	
					3		4305	5695		435	540	8130	158	737	8198	14757	
					4		4190	5810							8335	15003	
					5	459	3998	5543							7953	14315	
"	"	181	1	2	1	489	3310	5155	1046	409	503	6801	112	1129	6953	12515	7
					2		3480	5420	1100	430	472	7151	117	730	7310	13158	
					3		3910	6090		483	530	8036	131	820	8213	14784	
					4		3755	6245							8385	15093	
					5	556	3542	5892							7911	14239	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
								PITTSBURGH (CON.)									
JEFFERSON	WELLS	182	1	1	1	527	3487	4916	1070	307							4
					2		3681	5190	1129	324							
					3		4149	5851		365							
					4		4023	5977									
					5	607	3780	5613									
"	"	183	1	1	1	478	3593	5398	531	98	535	7413	146	1277	7417	13351	13
					2		3773	5669	568	103	506	7785	153	895	7789	14020	
					3		3996	6004		109	536	8245	162	948	8249	14849	
					4		3947	6053							8308	14954	
					5	510	3746	5744							7884	14192	
"	"	184	1	1	1	452	3640	5110	798	333					7157	12883	13
					2		3812	5352	836	349					7496	13493	
					3		4160	5840		381					8180	14724	
					4		4049	5951							8309	14956	
					5	505	3844	5651							7889	14200	
"	"	185	1	1	1	426	3661	5218	695	257					7307	13153	13
					2		3824	5450	726	268					7632	13738	
					3		4123	5877		289					8229	14813	
					4		4035	5965							8334	15001	
					5	458	3845	5687							7944	14300	
MEIGS	BEDFORD	202	1	2	1	543	4240	4119	1098	680					6517	11731	28
					2		4483	4356	1161	719					6891	12404	
					3		5072	4928		813					7796	14033	
					4		4913	5087							8013	14423	
					5	643	4598	4759							7498	13496	
"	"	241	1	2	1	2145	3249	3680	926	154	532	4891	105	3382	4541	8173	28
					2		4136	4685	1179	209	375	6226	134	1877	5781	10407	
					3		4689	5311		237	425	7058	152	2128	6554	11798	
					4		4596	5404							6646	11963	
					5	2407	3490	4103							5045	9081	
MORGAN	HOMER	239	1	2	1	480	4222	4303	995	519					6600	11880	29
					2		4435	4520	1045	545					6933	12479	
					3		4953	5047		609					7742	13935	
					4		4822	5178							7912	14241	
					5	556	4554	4890							7472	13450	
"	"	240	1	2	1	687	4055	4439	819	422	532	6739	90	1398	6722	12100	7
					2		4354	4767	879	453	490	7236	96	846	7218	12992	
					3		4774	5226		497	537	7933	105	928	7914	14244	
					4		4661	5339							8058	14504	
					5	773	4301	4926							7435	13383	
MUSKINGUM	UNION	238	1	2	1	671	4017	4198	1114	520					6496	11693	27
					2		4306	4500	1194	558					6963	12534	
					3		4890	5110		634					7907	14233	
					4		4745	5255							8102	14583	
					5	788	4371	4841							7463	13433	
WASHINGTON	LUDLOW	502	2	1	1	22	381	459	138	57	49	662	10	84	6744	12140	48
					2		389	470	141	58	47	677	10	67	6894	12410	
					3		453	547		68	55	788	12	77	8028	14450	
					4		435	565							8253	14856	
					5	27	423	550							8036	14464	
"	"	503	2	1	1	100	315	445	140	19	49	577	10	205	5472	9850	48
					2		350	494	156	21	42	641	11	129	6078	10940	
					3		415	585		25	50	759	13	153	7201	12950	
					4		401	599							7341	13214	
					5	119	353	528							6464	11636	
"	SALEM	494	1	2	1	219	4106	4600	1075	519	491	6837	70	1008	6972	12550	29
					2		4198	4703	1099	530	477	6991	71	832	7128	12831	
					3		4716	5284		595	536	7854	80	935	8008	14415	
					4		4574	5426							8192	14746	
					5	256	4457	5287							7983	14369	
								HARLEM									
CARROLL	LEE	316	1	2	1	707	3655	5034	604	57	549	7104	122	1564	7025	12645	26
					2		3933	5417	650	61	508	7644	131	1006	7559	13606	
					3		4206	5794		65	543	8176	140	1076	8084	14552	
					4		4163	5837							8141	14653	
					5	759	3847	5394							7523	13542	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B.t.u.	Year
									ANDERSON								
GUERNSEY	VALLEY	169	1	1	1	4.33	40.21	45.07	10.39	3.75	5.37	68.30	1.50	10.69	6940	12492	14
					2		42.03	47.11	10.86	3.92	5.11	71.39	1.57	7.15	7254	13057	
					3		47.15	52.85		4.40	5.73	80.09	1.76	8.02	8138	14648	
					4		45.98	54.02							8297	14935	
					5	4.99	43.68	51.33							7883	14189	
MUSKINGUM	HARRISON	385	1	2	1	5.56	42.72	39.92	11.70	4.88	5.30	63.61	1.03	13.48	6579	11842	17
					2		45.28	42.32	12.40	5.17	4.95	67.43	1.09	8.96	6974	12552	
					3		51.69	48.31		5.90	5.65	76.98	1.24	10.23	7961	14329	
					4		50.40	49.60							8153	14676	
					5	6.58	47.04	46.28							7609	13696	
"	SALT CREEK	384	1	2	1	6.61	39.84	44.96	8.59	2.08	5.61	68.90	1.32	13.50	6854	12337	17
					2		42.66	48.14	9.20	2.22	5.23	73.77	1.41	8.17	7339	13210	
					3		46.98	53.02		2.44	5.76	81.25	1.55	9.00	8083	14548	
					4		46.19	53.81							8191	14744	
					5	7.38	42.78	49.84							7587	13656	
NOBLE	NOBLE	493	1	2	1	3.29	40.84	46.67	9.20	2.67	3.84	69.90	.92	13.47	7060	12708	29
					2		42.23	48.26	9.51	2.76	3.59	72.29	.95	10.90	7301	13142	
					3		46.67	53.33		3.05	3.97	79.88	1.05	12.05	8068	14523	
					4		45.76	54.24							8190	14742	
					5	3.71	44.06	52.23							7885	14193	
									WILGUS								
LAWRENCE	MASON	204	1	2	1	6.95	39.08	46.42	7.55	3.60	5.43	66.83	1.33	15.26	6649	11968	28
					2		42.00	49.89	8.11	3.87	5.01	71.82	1.43	9.76	7145	12862	
					3		45.71	54.29		4.21	5.45	78.16	1.56	10.62	7776	13997	
					4		44.67	55.33							7898	14216	
					5	7.73	41.22	51.05							7287	13117	
"	SYMMES	206	1	2	1	8.15	38.48	45.90	7.47	2.83	5.40	66.18	1.28	16.84	6575	11835	28
					2		41.89	49.98	8.13	3.08	4.89	72.05	1.39	10.46	7158	12885	
					3		45.60	54.40		3.35	5.32	78.43	1.51	11.39	7791	14025	
					4		44.69	55.31							7901	14221	
					5	9.02	40.66	50.32							7188	12939	
									MAHONING								
COLUMBIANA	MADISON	425	1	2	1	3.18	36.47	52.21	8.14	1.53	5.31	72.92	1.34	10.76	7347	13224	21
					2		37.67	53.92	8.41	1.58	5.13	75.31	1.39	8.18	7587	13657	
					3		41.13	58.87		1.73	5.60	82.22	1.52	8.93	8284	14911	
					4		40.38	59.62							8377	15079	
					5	3.62	38.96	57.52							8083	14549	
"	MIDDLETON	424	1	2	1	3.22	36.76	52.38	7.64	1.98	5.26	73.10	1.42	10.60	7368	13263	21
					2		37.98	54.13	7.89	2.05	5.07	75.54	1.47	7.98	7614	13705	
					3		41.23	58.77		2.23	5.50	82.01	1.60	8.66	8266	14879	
					4		40.43	59.57							8364	15055	
					5	3.55	39.00	57.45							8067	14520	
"	"	547	1	4	1	4.15	36.20	47.15	12.50	2.06							99
					2		37.77	49.19	13.04	2.15							
					3		43.43	56.57		2.47							
					4		42.33	57.67									
					5	4.86	40.27	54.87									
"	YELLOW CREEK	120	1	1	1	3.15	39.32	51.15	6.38	3.55	5.56	75.35	1.35	7.81	7548	13586	16
					2		40.60	52.81	6.59	3.67	5.38	77.80	1.39	5.17	7793	14027	
					3		43.46	56.54		3.93	5.76	83.29	1.49	5.53	8343	15017	
					4		42.49	57.51							8464	15235	
					5	3.46	41.01	55.53							8172	14709	
JEFFERSON	ISLAND CREEK	189	1	1	1	3.89	36.46	52.85	7.40	3.63							4
					2		37.94	54.36	7.70	3.78							
					3		41.11	58.89		4.10							
					4		39.97	60.03									
					5	4.32	38.24	57.44									
									UPPER FREEPORT								
ATHENS	DOVER	488	1	2	1	8.11	37.44	50.11	4.34	1.21	5.62	62.32	1.23	25.28	6885	12393	29
					2		40.74	54.53	4.73	1.32	5.14	67.82	1.34	19.65	7493	13487	
					3		42.76	57.24		1.39	5.40	71.18	1.41	20.62	7865	14156	
					4		42.30	57.70							7918	14252	
					5	8.57	38.68	52.75							7238	13030	

County	Township	File number (1)	Kind (2)	Source (3)	Condition (4)	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								UPPER FREEPORT (CON.)									
ATHENS	DOVER	492	1	2	1	697	3958	4735	610	278					6936	12485	30
					2		4254	5090	656	299					7458	13425	
					3		4553	5447		320					7982	14368	
					4		4472	5528							8081	14545	
					5	759	4133	5108							7465	13437	
"	TRIMBLE	489	1	2	1	678	4087	4587	648	246	534	6007	91	2474	6842	12315	29
					2		4384	4921	695	264	493	6444	98	2006	7339	13211	
					3		4711	5289		284	530	6925	105	2156	7887	14198	
					4		4638	5362							7981	14366	
					5	740	4295	4965							7391	13303	
"	"	491	1	2	1	626	4119	4656	599	227	483	6963	110	1618	7016	12629	29
					2		4394	4967	639	242	441	7428	117	1133	7486	13475	
					3		4694	5306		259	471	7935	125	1210	7997	14395	
					4		4627	5373							8084	14552	
					5	678	4314	5008							7534	13562	
"	"	526 A	1	1	1	69	405	444	82	51	55	664	12	136	6739	12130	48
					2		435	477	88	55	51	713	13	80	7239	13030	
					3		478	522		61	56	782	14	87	7938	14290	
					4		465	535							8100	14580	
					5	78	428	494							7467	13440	
"	"	526 B	1	1	1	66	402	456	76	52	55	673	12	132	6800	12240	48
					2		430	489	81	56	52	721	13	77	7278	13100	
					3		468	532		61	56	785	14	84	7919	14270	
					4		456	544							8083	14550	
					5	74	422	504							7483	13470	
"	YORK	528 1	1	1	1	83	395	478	44	19	58	701	13	165	6944	12500	48
					2		430	522	48	21	53	765	14	99	7572	13630	
					3		452	548		22	55	803	15	105	7954	14310	
					4		446	554							8022	14440	
					5	88	408	504							7316	13168	
"	"	528 2	1	1	1	87	354	457	102	22	55	644	12	165	6372	11470	48
					2		388	501	111	24	49	706	13	97	6978	12560	
					3		437	563		27	55	794	15	109	7849	14130	
					4		426	574							7972	14350	
					5	99	384	517							7190	12942	
"	"	528 3	1	1	1	49	353	445	153	55	48	604	12	128	6133	11040	48
					2		371	469	160	57	45	635	13	90	6450	11610	
					3		442	558		68	54	757	15	106	7678	13830	
					4		421	579							7906	14230	
					5	61	396	543							7434	13381	
COLUMBIANA	MADISON	132 A	1	1	1	337	3789	5158	706	292					7471	13448	16
					2		3921	5348	731	302					7731	13916	
					3		4230	5770		326					8341	15013	
					4		4137	5863							8455	15219	
					5	371	3984	5645							8142	14655	
"	"	132 B	1	1	1	377	3832	4993	798	365					7398	13316	16
					2		3982	5189	829	379					7688	13838	
					3		4342	5658		413					8383	15089	
					4		4231	5769							8523	15342	
					5	422	4053	5525							8164	14695	
"	"	132 K	1	1	1	360	3780	5122	738	321	535	7368	185	853	7439	13390	16
					2		3921	5313	766	333	513	7643	192	553	7716	13889	
					3		4246	5754		361	556	8276	208	599	8356	15041	
					4		4145	5855							8481	15265	
					5	399	3980	5621							8142	14656	
"	"	344	1	2	1	245	3697	4995	1063	380	507	6939	121	990	7152	12874	21
					2		3789	5122	1089	389	492	7112	124	794	7331	13196	
					3		4252	5748		437	552	7981	139	891	8227	14809	
					4		4119	5881							8389	15101	
					5	283	4004	5713							8153	14676	
"	MIDDLETON	343	1	2	1	317	3696	5427	560	204	535	7563	133	1005	7674	13813	21
					2		3817	5604	579	211	516	7811	137	746	7926	14266	
					3		4052	5948		224	548	8291	145	792	8413	15143	
					4		3981	6019							8497	15294	
					5	341	3846	5813							8206	14770	
"	ST. CLAIR	133	1	1	1	427	3643	4766	1164	304					6977	12559	16
					2		3805	4979	1216	318					7288	13118	
					3		4332	5668		362					8297	14934	
					4		4207	5793							8458	15225	
					5	498	3998	5504							8038	14468	
"	"	134	1	1	1	527	3628	4951	894	401					7118	12812	16
					2		3830	5226	944	423					7514	13525	
					3		4229	5771		467					8297	14935	
					4		4098	5902							8455	15219	
					5	598	3853	5549							7949	14309	
"	WASHINGTON	342	1	2	1	342	3866	4918	874	361	517	7045	132	1071	7221	12998	21
					2		4003	5092	905	373	496	7294	136	796	7477	13459	
					3		4401	5599		410	545	8020	150	875	8221	14798	
					4		4289	5711							8363	15053	
					5	386	4123	5491							8039	14471	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								UPPER FREEPORT (CON.)									
COLUMBIANA	WEST	341	1	2	1	7.18	34.96	48.91	8.95	2.52	5.15	66.72	1.25	15.41	6705	12069	21
					2		37.66	52.69	9.65	2.72	4.69	71.88	1.34	9.72	7224	13003	
					3		41.68	58.32		3.01	5.19	79.56	1.48	10.76	7996	14392	
					4		40.64	59.36							8116	14608	
					5	8.07	37.37	54.56							7459	13427	
"	YELLOW CREEK	135	1	1	1	5.13	38.01	48.58	8.28	3.78					7200	12960	16
					2		40.07	51.20	8.73	3.98					7590	13662	
					3		43.90	56.10		4.36					8316	14969	
					4		42.75	57.25							8463	15233	
					5	5.77	40.27	53.96							7974	14353	
"	"	137	1	1	1	3.46	36.74	48.87	10.93	4.28	5.24	69.89	1.38	8.28	7073	12731	16
					2		38.06	50.62	11.32	4.43	5.03	72.39	1.43	5.40	7326	13187	
					3		53.36	46.64		5.00	5.67	81.63	1.61	6.09	8261	14870	
					4		41.46	58.54							8441	15193	
					5	4.03	39.79	56.18							8101	14582	
"	"	141	1	1	1	3.43	37.81	51.28	7.48	2.86	5.53	74.31	1.48	8.34	7425	13365	16
					2		39.15	53.10	7.75	2.96	5.33	76.95	1.53	5.48	7689	13840	
					3		42.44	57.56		3.21	5.78	83.41	1.66	5.94	8335	15003	
					4		41.49	58.51							8452	15213	
					5	3.80	39.92	56.28							8130	14634	
GALLIA	WALNUT	339	1	2	1	7.52	32.85	47.14	12.39	1.81	5.19	63.48	1.28	15.85	6371	11468	2
					2		35.56	51.03	13.41	1.96	4.70	68.71	1.39	9.83	6896	12413	
					3		41.07	58.93		2.26	5.43	79.35	1.61	11.35	7964	14335	
					4		39.91	60.09							8102	14584	
					5	8.90	36.36	54.74							7382	13288	
GUERNSEY	CENTER	147 A	1	1	1	5.80	36.89	50.73	6.58	2.62							5
					2		39.16	53.85	6.99	2.78							
					3		42.10	57.90		2.99							
					4		41.23	58.77									
					5	6.34	38.62	55.04									
"	"	147 B	1	1	1	6.28	35.81	50.61	7.30	3.55					7056	12701	5
					2		38.21	54.00	7.79	3.79					7529	13552	
					3		41.44	58.56		4.11					8165	14697	
					4		40.30	59.70							8294	14930	
					5	6.97	37.49	55.54							7717	13890	
"	"	337	1	2	1	6.47	35.90	51.35	5.78	1.13	5.41	72.59	1.41	13.68	7076	12736	25
					2		38.38	55.44	6.18	1.21	5.01	77.61	1.51	8.48	7565	13617	
					3		40.91	59.09		1.89	5.34	82.72	1.61	9.04	8063	14514	
					4		40.36	59.64							8128	14630	
					5	6.95	37.56	55.49							7563	13614	
"	RICHLAND	167 A	1	1	1	6.09	35.22	51.76	6.93	1.62					7077	12739	14
					2		37.50	55.12	7.38	1.72					7536	13565	
					3		40.49	59.51		1.86					8136	14646	
					4		39.77	60.23							8221	14798	
					5	6.55	37.12	56.83							7675	13815	
"	"	167 B	1	1	1	5.95	35.73	50.37	7.95	2.15					7034	12661	14
					2		37.99	53.56	8.45	2.28					7479	13462	
					3		41.50	58.50		2.49					8169	14705	
					4		40.62	59.38							8274	14894	
					5	6.59	37.94	55.47							7729	13913	
"	"	167 K	1	1	1	6.07	35.04	51.56	7.33	1.95	5.37	71.24	1.39	12.72	7062	12712	14
					2		37.30	54.90	7.80	2.08	5.00	75.84	1.48	7.80	7518	13532	
					3		40.46	59.54		2.26	5.42	82.25	1.61	8.46	8154	14677	
					4		39.64	60.36							8249	14849	
					5	6.57	37.00	56.33							7700	13860	
"	"	175 A	1	1	1	5.37	35.80	50.78	8.05	1.64					7102	12784	14
					2		37.83	53.66	8.51	1.73					7505	13509	
					3		41.35	58.65		1.89					8203	14766	
					4		40.57	59.43							8299	14938	
					5	5.94	38.16	55.90							7806	14050	
"	"	175 B	1	1	1	6.38	33.67	52.14	7.81	2.16					7015	12627	14
					2		35.96	55.70	8.34	2.31					7493	13487	
					3		39.23	60.77		2.52					8175	14714	
					4		38.31	61.69							8279	14903	
					5	7.06	35.61	57.33							7696	13852	
"	"	175 K	1	1	1	6.00	34.22	51.95	7.83	1.98	5.38	71.38	1.32	12.11	7067	12721	14
					2		36.40	55.27	8.33	2.11	5.01	75.93	1.40	7.22	7518	13532	
					3		39.71	60.29		2.30	5.47	82.82	1.53	7.88	8201	14762	
					4		38.83	61.17							8302	14944	
					5	6.63	36.27	57.10							7752	13954	
"	"	338	1	2	1	4.98	36.42	51.36	7.24	1.38	5.27	71.99	1.43	12.69	7094	12769	25
					2		38.33	54.05	7.62	1.45	4.97	75.76	1.50	8.70	7466	13438	
					3		41.49	58.51		1.57	5.38	82.01	1.62	9.42	8082	14546	
					4		40.83	59.17							8162	14692	
					5	5.45	38.60	55.95							7718	13892	
"	"	591	3	4	1	2.67	39.44	45.76	12.13	3.19					6816	12268	52
					2		40.52	47.02	12.46	3.28					7003	12605	
					3		46.29	53.71		3.75					7999	14399	
					4		45.09	54.91							8157	14682	
					5	3.14	43.58	53.18							7901	14221	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
						UPPER FREEPORT (CON.)											
GUERNSEY	RICHLAND	592		3	4	1	2.56	32.81	50.92	13.61	1.25					6679	12022	52
						2		33.71	52.31	13.98	1.28					6862	12351	
						3		39.19	60.81		1.49					7977	14358	
						4		38.10	61.90							8107	14593	
						5	3.14	36.90	59.96							7852	14134	
"	"	593		3	4	1	2.73	34.64	53.19	9.44	1.25					7056	12701	52
						2		35.61	54.68	9.71	1.29					7254	13057	
						3		39.44	60.56		1.43					8034	14461	
						4		38.54	61.36							8128	14631	
						5	3.06	37.47	59.47							7879	14182	
"	"	594		3	4	1	2.75	34.71	50.79	11.75	1.82					6917	12450	52
						2		35.69	52.23	12.08	1.87					7112	12802	
						3		40.59	59.41		2.13					8089	14561	
						4		39.54	60.46							8217	14790	
						5	3.19	38.28	58.53							7955	14319	
"	"	595		3	4	1	2.57	35.31	49.19	12.93	2.30					6786	12215	52
						2		36.24	50.49	13.27	2.36					6965	12537	
						3		41.78	58.22		2.72					8031	14455	
						4		40.58	59.42							8178	14720	
						5	3.03	39.35	57.62							7929	14273	
"	VALLEY	170 A	1	1	1	1	6.88	34.07	53.30	5.75	.84					7104	12787	14
						2		36.58	57.24	6.18	.90					7628	13732	
						3		38.99	61.01		.96					8130	14637	
						4		38.48	61.52							8191	14744	
						5	7.37	35.65	56.98							7587	13656	
"	"	170 B	1	1	1	1	6.85	36.16	52.89	5.30	.88					7224	13003	14
						2		38.57	55.78	5.65	.94					7705	13869	
						3		40.88	59.12		1.00					8166	14700	
						4		40.42	59.58							8223	14802	
						5	6.56	37.73	55.61							7676	13817	
"	"	170 C[16]	1	2	1	1	5.78	36.45	51.38	6.39	1.77	5.31	72.19	1.30	13.04	7106	12790	25
						2		38.69	54.53	6.78	1.88	4.96	76.62	1.38	8.38	7542	13575	
						3		41.50	58.50		2.02	5.32	82.19	1.48	8.99	8091	14562	
						4		40.81	59.19							8172	14710	
						5	6.27	38.25	55.48							7659	13787	
"	"	170 K	1	1	1	1	6.49	35.41	52.57	5.53	.88	5.49	73.41	1.37	13.32	7189	12940	14
						2		37.87	56.22	5.91	.94	5.10	78.50	1.47	8.08	7688	13838	
						3		40.25	59.75		1.00	5.42	83.43	1.56	8.59	8171	14707	
						4		39.76	60.24							8229	14813	
						5	6.94	37.00	56.06							7659	13786	
"	"	335		1	2	1	5.07	38.65	48.31	7.97	2.84	5.20	70.32	1.58	12.09	6976	12556	25
						2		40.71	50.89	8.40	2.99	4.89	74.08	1.67	7.97	7348	13226	
						3		44.44	55.56		3.26	5.34	80.88	1.82	8.70	8022	14439	
						4		43.50	56.50							8137	14646	
						5	5.54	41.06	53.30							7677	13819	
"	"	336		1	2	1	5.32	36.86	51.45	6.37	1.39	5.32	72.36	1.41	13.15	7133	12840	25
						2		38.93	54.34	6.73	1.47	5.00	76.43	1.49	8.88	7534	13561	
						3		41.74	58.26		1.58	5.36	81.94	1.60	9.52	8078	14540	
						4		41.13	58.87							8152	14673	
						5	5.76	38.76	55.48							7682	13827	
HARRISON	FREEPORT	333 A	1	2	1	1	6.17	38.18	47.72	7.93	3.62	5.28	69.51	1.41	12.25	7002	12604	25
						2		40.69	50.86	8.45	3.86	4.89	74.08	1.50	7.22	7462	13432	
						3		44.45	55.55		4.22	5.34	80.91	1.64	7.89	8151	14672	
						4		43.35	56.65							8287	14917	
						5	6.90	40.36	52.74							7716	13889	
"	"	333 B	1	4	1	1	.61	3.59	5.01	.79	.29	.54	7.03	.14	1.21	6983	12570	24
						2		3.82	5.34	.84	.31	.50	7.49	.15	1.11	7439	13390	
						3		4.17	5.83		.34	.55	8.18	.16	1.77	8122	14620	
						4		4.07	5.93							8241	14834	
						5	.68	3.79	5.53							7681	13825	
"	"	529[17]	3	1	1	1	.33	3.40	5.37	.90	.31	.50	7.17	.13	.99	7061	12710	23
						2		3.52	5.55	.93	.32	.48	7.41	.14	.72	7300	13140	
						3		3.88	6.12		.36	.53	8.17	.15	.79	8050	14490	
						4		3.76	6.24							8176	14717	
						5	.39	3.62	6.01							7874	14174	
"	"	530		1	1	1	.67	3.48	5.08	.77	.23	.53	7.04	.14	1.29	6972	12550	24
						2		3.73	5.45	.82	.25	.49	7.54	.15	.75	7472	13450	
						3		4.06	5.94		.27	.54	8.21	.16	.82	8139	14650	
						4		3.97	6.03							8247	14844	
						5	.74	3.68	5.58							7641	13753	
"	"	532		3	4	1	2.95	37.09	53.05	6.91	2.89					7538	13569	23
						2		38.22	54.66	7.12	2.98					7767	13981	
						3		41.15	58.85		3.21					8362	15053	
						4		40.21	59.79							8475	15255	
						5	3.24	38.91	57.85							8201	14761	
"	"	533		3	4	1	2.54	37.72	52.94	6.80	3.61					7439	13390	23
						2		38.70	54.32	6.98	3.70					7633	13739	
						3		41.60	58.40		3.98					8206	14770	
						4		40.54	59.46							8327	14989	
						5	2.80	39.41	57.79							8094	14569	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B.t.u.	Year
								UPPER FREEPORT (CON.)									
HARRISON	FREEPORT	534	3	4	1	2.49	38.25	51.83	7.43	3.62					7325	13185	23
					2		39.23	53.15	7.62	3.71					7512	13522	
					3		42.47	57.53		4.02					8132	14637	
					4		41.39	58.61							8257	14863	
					5	2.77	40.23	57.00							8028	14451	
"	"	535	3	4	1	2.16	39.26	51.20	7.38	2.83					7706	13871	14
					2		40.13	52.33	7.54	2.89					7876	14177	
					3		43.40	56.60		3.13					8518	15333	
					4		42.51	57.49							8636	15545	
					5	2.39	41.49	56.12							8431	15175	
"	MONROE	332	1	2	1	6.84	36.01	46.88	10.27	2.63	5.16	67.22	1.42	13.30	6650	11970	25
					2		38.65	50.32	11.03	2.82	4.72	72.16	1.52	7.75	7138	12848	
					3		43.44	56.56		3.17	5.31	81.10	1.71	8.71	8023	14441	
					4		42.34	57.66							8158	14684	
					5	7.82	39.03	53.15							7520	13536	
JEFFERSON	SALINE	138 A	1	1	1	4.75	38.28	51.91	5.06	1.76					7480	13464	16
					2		40.19	54.50	5.31	1.85					7853	14135	
					3		42.44	57.56		1.95					8293	14135	
					4		41.85	58.15							8366	15059	
					5	5.08	39.72	55.20							7942	14296	
"	"	138 B	1	1	1	3.43	36.26	49.57	10.74	5.05	5.15	69.66	1.37	8.03	7068	12722	16
					2		37.55	51.33	11.12	5.23	4.94	72.13	1.42	5.16	7319	13174	
					3		42.25	57.75		5.88	5.56	81.15	1.60	5.81	8235	14822	
					4		40.61	59.39							8428	15171	
					5	4.01	38.98	57.01							8091	14563	
"	"	139	1	1	1	3.73	36.54	51.24	8.49	2.87					7290	13122	16
					2		37.95	53.23	8.82	2.98					7572	13630	
					3		41.62	58.38		3.27					8304	14948	
					4		40.58	59.42							8431	15175	
					5	4.18	38.89	56.93							8078	14541	
LAWRENCE	AID	329	1	2	1	8.45	31.25	49.02	11.28	.93	5.10	65.20	1.28	16.21	6405	11529	1
					2		34.13	53.55	12.32	1.02	4.64	71.22	1.40	9.50	6996	12593	
					3		38.93	61.07		1.16	5.18	81.23	1.60	10.83	7979	14362	
					4		38.01	61.99							8089	14561	
					5	9.68	34.33	55.99							7307	13152	
"	"	330	1	2	1	8.37	31.80	51.60	8.23	1.29	5.21	66.94	1.31	17.02	6596	11873	1
					2		34.70	56.32	8.98	1.41	4.67	73.05	1.43	10.46	7198	12956	
					3		38.12	61.88		1.55	5.13	80.26	1.57	11.49	7908	14234	
					4		37.33	62.67							7996	14393	
					5	9.26	33.98	56.86							7257	13062	
"	"	331	1	2	1	7.85	32.90	47.07	12.18	2.66	5.09	63.03	1.25	15.79	6305	11349	1
					2		35.70	51.08	13.22	2.89	4.58	68.40	1.35	9.56	6842	12316	
					3		41.14	58.86		3.33	5.28	78.81	1.56	11.02	7884	14192	
					4		39.80	60.20							8037	14467	
					5	9.19	36.15	54.66							7298	13136	
"	LAWRENCE	328	1	2	1	7.20	32.25	49.88	10.67	2.33	5.03	65.03	1.25	15.69	6556	11801	1
					2		34.75	53.75	11.50	2.51	4.56	70.07	1.35	10.01	7065	12717	
					3		39.27	60.73		2.84	5.15	79.17	1.53	11.31	7983	14369	
					4		38.08	61.92							8115	14607	
					5	8.26	34.94	56.80							7444	13400	
"	SYMMES	325	1	2	1	8.38	31.45	50.08	10.09	1.84	5.18	64.90	1.27	16.72	6497	11695	1
					2		34.33	54.56	11.01	2.01	4.64	70.83	1.39	10.12	7091	12764	
					3		38.58	61.42		2.26	5.21	79.60	1.56	11.37	7968	14343	
					4		37.52	62.48							8086	14555	
					5	9.51	33.95	56.54							7318	13172	
"	"	326	1	2	1	7.13	33.65	50.31	8.91	1.31	5.33	67.09	1.28	16.08	6716	12089	1
					2		36.23	54.17	9.60	1.41	4.89	72.24	1.37	10.49	7231	13016	
					3		40.08	59.92		1.56	5.41	79.91	1.52	11.60	7999	14398	
					4		39.27	60.73							8094	14569	
					5	7.95	36.16	55.89							7451	13411	
"	"	327	1	2	1	8.77	31.70	50.82	8.71	.76	5.32	66.88	1.25	17.08	6586	11855	1
					2		34.75	55.70	9.55	.83	4.77	73.30	1.37	10.18	7219	12994	
					3		38.42	61.58		.92	5.27	81.04	1.51	11.26	7981	14366	
					4		37.72	62.28							8064	14516	
					5	9.73	34.04	56.23							7280	13104	
MUSKINGUM	BRUSH CREEK	324	1	2	1	4.72	43.47	44.25	7.56	5.00	5.55	68.27	1.32	12.30	7046	12683	2
					2		45.62	46.45	7.93	5.25	5.28	71.65	1.38	8.51	7395	13311	
					3		49.55	50.45		5.70	5.73	77.83	1.50	9.24	8032	14457	
					4		48.43	51.57							8187	14736	
					5	5.30	45.87	48.83							7753	13956	
"	HARRISON	322	1	2	1	4.89	42.35	44.98	7.78	4.36	5.53	67.74	1.17	13.42	6944	12499	2
					2		44.53	47.29	8.18	4.58	5.25	71.22	1.23	9.54	7301	13142	
					3		48.50	51.50		4.99	5.72	77.56	1.34	10.39	7951	14313	
					4		47.43	52.57							8093	14567	
					5	5.48	44.83	49.69							7649	13768	
"	"	323	1	2	1	4.27	45.63	41.07	9.03	5.23	5.36	67.98	1.12	11.28	6967	12541	17
					2		47.67	42.90	9.43	5.46	5.11	71.01	1.17	7.82	7278	13100	
					3		52.63	47.37		6.03	5.64	78.41	1.29	8.63	8036	14464	
					4		51.53	48.47							8209	14776	
					5	4.89	49.00	46.11							7808	14054	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								UPPER FREEPORT (CON.)									
MUSKINGUM	PERRY	321	1	2	1	928	3890	4353	819	362	560	6571	97	1591	6584	11851	17
					2		4288	4809	903	399	504	7243	107	844	7257	13063	
					3		4714	5286		439	554	7961	118	928	7977	14360	
					4		4606	5394							8116	14609	
					5	1041	4127	4832							7271	13088	
"	WAYNE	320	1	2	1	511	3550	4679	1260	384	511	6481	125	1239	6558	11804	2
					2		3741	4931	1328	405	478	6830	132	827	6911	12440	
					3		4314	5686		467	551	7876	152	954	7969	14345	
					4		4162	5838							8149	14668	
					5	606	3911	5483							7654	13778	
NOBLE	NOBLE	166 A	1	1	1	488	3776	4893	843	295					7073	12731	13
					2		3970	5144	886	310					7436	13385	
					3		4356	5644		340					8159	14686	
					4		4255	5745							8284	14911	
					5	547	4022	5431							7831	14096	
"	"	166 B	1	1	1	513	3717	4959	811	299					7053	12695	13
					2		3918	5227	855	315					7435	13383	
					3		4284	5716		344					8130	14634	
					4		4182	5818							8253	14855	
					5	573	3942	5485							7779	14002	
"	"	166 K	1	1	1	515	3734	4900	851	294	542	7051	150	1112	7074	12733	13
					2		3937	5166	897	310	512	7434	158	689	7459	13426	
					3		4325	5675		341	562	8166	174	757	8194	14749	
					4		4222	5778							8321	14977	
					5	577	3979	5444							7839	14111	
"	"	319	1	2	1	477	3706	5033	784	243	526	7157	141	1149	7028	12651	25
					2		3892	5285	823	255	497	7515	148	762	7380	13285	
					3		4241	5759		278	542	8189	161	830	8042	14476	
					4		4151	5849							8148	14667	
					5	529	3951	5540							7717	13891	
PERRY	MONROE	490	1	2	1	542	4174	4679	605	270					6971	12547	29
					2		4413	4948	659	285					7368	13263	
					3		4714	5286		304					7871	14168	
					4		4641	5359							7963	14334	
					5	589	4368	5043							7497	13494	
TUSCARAWAS	MILL	318	1	2	1	632	3766	4948	654	291	526	7078	143	1308	6985	12573	25
					2		4020	5282	698	311	487	7556	153	795	7456	13421	
					3		4322	5678		334	524	8123	164	855	8015	14428	
					4		4231	5769							8121	14617	
					5	692	3938	5370							7559	13606	
"	RUSH	317	1	2	1	638	3959	4702	691	313	535	6942	139	1380	7005	12609	25
					2		4239	5022	739	334	496	7415	148	868	7482	13468	
					3		4577	5423		361	536	8006	160	937	8079	14543	
					4		4487	5513							8194	14749	
					5	703	4171	5126							7618	13712	
								LOWER FREEPORT									
ATHENS	YORK	524 1	1	1	1	54	406	456	84	29	55	679	13	140	6822	12280	48
					2		429	482	89	30	52	718	14	97	7211	12980	
					3		471	529		33	57	788	15	107	7915	14240	
					4		462	538							8032	14458	
					5	60	434	506							7547	13584	
"	"	524 2	1	1	1	53	413	467	67	29	55	695	12	142	7000	12600	48
					2		436	493	71	31	52	735	13	98	7394	13310	
					3		470	530		33	56	791	14	106	7959	14330	
					4		461	539							8064	14516	
					5	58	434	508							7589	13661	
COLUMBIANA	ST. CLAIR	129	1	1	1	358	3847	4748	1047	449	539	7004	156	805	7138	12848	16
					2		3990	4924	1086	466	518	7264	162	504	7403	13325	
					3		4476	5524		523	581	8149	182	565	8305	14948	
					4		4336	5664							8486	15275	
					5	415	4156	5429							8134	14641	
"	YELLOW CREEK	130	1	1	1	594	3273	4981	1152	149	528	6830	135	1206	6726	12107	17
					2		3480	5295	1225	158	491	7262	144	720	7151	12872	
					3		3956	6034		180	560	8275	164	821	8149	14669	
					4		3864	6136							8274	14893	
					5	685	3598	5717							7707	13872	
JEFFERSON	ISLAND CREEK	349	1	2	1	310	3806	4891	993	360	514	7053	110	970	7222	12999	26
					2		3928	5047	1025	371	496	7279	114	715	7453	13415	
					3		4377	5623		413	553	8110	127	797	8304	14947	
					4		4256	5744							8459	15226	
					5	355	4104	5541							8158	14685	
"	SALINE	131	1	1	1	426	3565	4810	1209	236					6941	12494	16
					2		3713	5024	1253	246					7250	13050	
					3		4250	5750		282					8298	14936	
					4		4133	5867							8448	15207	
					5	497	3928	5575							8028	14450	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								LOWER FREEPORT (CON.)									
JEFFERSON	SPRINGFIELD	195 A	1	1	1	340	3801	5237	622	220					7518	13532	12
					2		3935	5421	644	228					7783	14009	
					3		4206	5794		244					8319	14973	
					4		4131	5869							8410	15138	
					5	359	3979	5652							8099	14578	
"	"	195 B	1	1	1	350	3793	5063	794	314					7364	13255	12
					2		3931	5246	823	325					7631	13736	
					3		4284	5716		354					8315	14968	
					4		4182	5818							8442	15196	
					5	390	4018	5592							8112	14602	
"	"	195 C	1	1	1	359	3703	5054	874	370	519	7130	139	968	7224	13003	12
					2		3841	5252	907	384	497	7395	144	673	7493	13487	
					3		4224	5776		422	547	8133	158	740	8240	14832	
					4		4103	5897							8384	15092	
					5	406	3936	5658							8044	14479	
"	"	196 A	1	1	1	347	3861	4956	826	240					7346	13223	12
					2		4000	5144	856	249					7610	13698	
					3		4374	5626		272					8322	14980	
					4		4287	5713							8436	15185	
					5	387	4121	5492							8110	14598	
"	"	196 B	1	1	1	358	3758	4917	957	308					7156	12881	12
					2		3897	5100	1003	319					7421	13358	
					3		4331	5669		355					8248	14847	
					4		4280	5780							8388	15099	
					5	407	4049	5544							8047	14485	
"	"	196 C	1	1	1	404	3861	4893	842	295					7234	13021	12
					2		4024	5099	877	307					7539	13570	
					3		4411	5589		337					8264	14874	
					4		4312	5688							8390	15102	
					5	452	4117	5431							8011	14419	
"	"	347	1	2	1	383	4100	4768	749	286	550	7176	117	1122	7269	13084	26
					2		4264	4957	779	298	528	7462	122	811	7558	13604	
					3		4624	5376		323	573	8092	132	880	8197	14753	
					4		4539	5461							8311	14959	
					5	424	4346	5230							7958	14325	
"	"	571 A	1	1	1	366	3743	5123	768	307					7342	13216	12
					2		3885	5318	797	319					7621	13718	
					3		4221	5779		347					8281	14906	
					4		4121	5879							8403	15126	
					5	407	3953	5640							8062	14511	
"	"	571 B	1	1	1	352	3831	5078	739	299					7363	13253	12
					2		3971	5263	766	310					7632	13738	
					3		4300	5700		336					8265	14878	
					4		4205	5795							8383	15089	
					5	389	4042	5569							8055	14499	
"	"	571 C	1	1	1	327	3887	5057	749	323					7359	13246	12
					2		4018	5208	774	334					7608	13694	
					3		4365	5645		362					8246	14843	
					4		4256	5744							8368	15063	
					5	353	4102	5535							8065	14517	
"	"	571 D	1	1	1	336	3756	5206	702	240							10
					2		3887	5387	726	248							
					3		4191	5809		267							
					4		4108	5892									
					5	359	3956	5675									
"	STEUBENVILLE	187 A	1	1	1	380	3539	5339	742	191					7344	13219	13
					2		3679	5550	771	199					7634	13741	
					3		3986	6014		216					8272	14889	
					4		3906	6094							8367	15060	
					5	418	3742	5840							8018	14432	
"	"	187 B	1	1	1	382	3590	5343	685	190	524	7420	145	1036	7418	13352	13
					2		3733	5555	712	198	501	7715	151	723	7712	13882	
					3		4019	5981		213	539	8307	163	778	8303	14946	
					4		3943	6057							8394	15109	
					5	417	3778	5805							8044	14480	
MUSKINGUM	MADISON	345	1	2	1	535	4446	4333	686	209	585	7003	140	1377	7099	12778	17
					2		4697	4578	725	220	556	7399	147	953	7500	13500	
					3		5064	4936		237	599	7977	159	1028	8086	14555	
					4		5003	4997							8178	14721	
					5	585	4711	4704							7700	13860	
								MIDDLE KITTANNING									
ATHENS	ATHENS	298	1	2	1	617	3640	4961	782	90	543	6922	130	1533	6868	12362	2
					2		3880	5287	833	96	505	7377	139	1050	7319	13174	
					3		4233	5767		105	551	8047	152	1145	7984	14371	
					4		4172	5828							8060	14508	
					5	678	3889	5433							7514	13526	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
		1	2	3	4												
						MIDDLE KITTANNING (CON.)											
ATHENS	CANAAN	297	1	2	1	6.36	34.19	50.96	8.49	.51	5.40	69.25	1.43	14.92	6919	12454	7
					2		36.51	54.42	9.07	.54	5.01	73.95	1.53	9.90	7389	13300	
					3		40.15	59.85		.59	5.51	81.33	1.68	10.89	8126	14626	
					4		39.56	60.44							8201	14762	
					5	7.02	36.79	56.19							7625	13725	
"	DOVER	299	1	2	1	7.14	34.22	51.92	6.72	1.65	5.56	69.32	1.30	15.45	6863	12353	2
					2		36.85	55.91	7.24	1.78	5.14	74.65	1.39	9.80	7390	13302	
					3		39.73	60.27		1.92	5.54	80.48	1.50	10.56	7967	14340	
					4		38.99	61.01							8049	14488	
					5	7.77	35.96	56.27							7423	13361	
"	"	486 A	1	1	1	9.3	35.4	50.0	5.3	.9					6850	12330	30
					2		39.0	55.1	5.9	1.0					7552	13594	
					3		41.4	58.6		1.1					8026	14446	
					4		40.9	59.1							8078	14540	
					5	9.9	36.9	53.2							7278	13100	
"	"	486 B	1	1	1	8.80	35.5	50.3	5.4	.6					6900	12420	30
					2		38.9	55.2	5.9	.7					7566	13618	
					3		41.3	58.7		.7					8040	14472	
					4		41.0	59.0							8094	14570	
					5	9.4	37.1	53.5							7333	13200	
"	"	486 C	1	1	1	9.8	35.4	48.7	6.1	.8					6717	12090	30
					2		39.2	54.0	6.8	.9					7447	13404	
					3		42.1	57.9		1.0					7990	14382	
					4		41.6	58.4							8050	14490	
					5	10.5	37.2	52.3							7200	12960	
"	"	486 D[18]	1	2	1	6.02	39.28	49.74	4.96	.81	4.41	71.32	.98	17.52	7067	12720	30
					2		41.80	52.93	5.27	.86	3.98	75.88	1.04	12.97	7518	13532	
					3		44.13	55.87		.91	4.20	80.10	1.10	13.69	7936	14285	
					4		43.73	56.27							7986	14375	
					5	6.39	40.94	52.67							7478	13460	
"	"	486 K	1	1	1	8.5	35.3	50.0	6.1	.8	5.6	69.4	1.4	16.7	6817	12270	30
					2		38.6	54.8	6.6	.9	5.1	75.9	1.5	10.0	7456	13420	
					3		41.3	58.7		1.0	5.4	81.3	1.7	10.6	7989	14380	
					4		40.9	59.1							8056	14500	
					5	9.3	37.0	53.7							7306	13150	
"	"	606 1	3	3	1	4.11	36.87	51.94	7.08	.68					6962	12532	54
					2		38.45	54.17	7.38	.71					7260	13069	
					3		41.51	58.49		.77					7838	14110	
					4		41.00	59.00							7902	14223	
					5	4.47	39.17	56.36							7549	13588	
"	"	606 2	3	3	1	3.33	34.55	45.18	16.94	2.11					6197	11156	54
					2		35.74	46.74	17.52	2.18					6410	11540	
					3		43.33	56.67		2.64					7772	13991	
					4		41.90	58.10							7950	14310	
					5	4.13	40.17	55.70							7622	13720	
"	"	606 3	3	3	1	2.77	39.08	40.86	17.29	3.48					6267	11281	54
					2		40.19	42.03	17.78	3.58					6446	11602	
					3		48.88	51.12		4.35					7840	14111	
					4		47.36	52.64							8051	14491	
					5	3.49	45.71	50.80							7770	13986	
"	"	606 9	3	3	1	3.43	36.73	46.02	13.82	1.96					6455	11620	54
					2		38.03	47.56	14.31	2.03					6684	12033	
					3		44.38	55.62		2.37					7800	14042	
					4		43.24	56.76							7945	14301	
					5	4.08	41.48	54.44							7621	13717	
"	TRIMBLE	295	1	2	1	7.28	32.38	53.51	6.73	.86	5.45	69.46	1.34	16.16	6894	12409	2
					2		34.92	57.82	7.26	.93	5.00	74.91	1.45	10.45	7435	13383	
					3		37.55	62.35		1.00	5.39	80.78	1.56	11.27	8017	14431	
					4		37.06	62.94							8084	14552	
					5	7.89	34.14	57.97							7447	13404	
"	WATERLOO	293	1	2	1	6.70	35.36	51.19	6.75	2.28	5.49	69.21	1.18	15.09	6921	12458	2
					2		37.90	54.87	7.23	2.44	5.09	74.18	1.26	9.80	7418	13352	
					3		40.85	59.15		2.63	5.49	79.96	1.36	10.56	7996	14393	
					4		40.01	59.99							8091	14563	
					5	7.33	37.07	55.60							7498	13497	
"	"	294	1	2	1	6.80	36.90	48.25	8.05	2.14	5.49	67.40	1.37	15.55	6794	12229	2
					2		39.59	51.77	8.54	2.30	5.07	72.32	1.47	10.20	7290	13122	
					3		43.33	56.67		2.62	5.55	79.16	1.61	11.16	7979	14363	
					4		42.48	57.52							8083	14549	
					5	7.54	39.28	53.18							7472	13450	
"	YORK	485	1	2	1	7.40	39.28	47.92	5.40	.97	4.47	69.85	.98	18.33	7029	12652	30
					2		42.42	51.75	5.83	1.04	3.95	75.44	1.05	12.69	7591	13663	
					3		45.05	54.95		1.10	4.19	80.11	1.12	13.48	8061	14509	
					4		44.60	55.40							8119	14615	
					5	7.90	41.08	51.02							7478	13460	
CARROLL	ORANGE	296	1	2	1	3.76	39.11	50.34	6.79	3.06	5.36	71.99	1.40	11.40	7238	13028	2
					2		40.64	52.31	7.05	3.18	5.13	74.80	1.46	8.38	7521	13537	
					3		43.72	56.28		3.42	5.52	80.47	1.57	9.02	8091	14564	
					4		42.81	57.19							8200	14760	
					5	4.13	41.05	54.82							7862	14151	

County	Township	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
								MIDDLE KITTANNING (CON.)									
COLUMBIANA	LIVERPOOL	125	1	1	1	479	3483	5295	743	179	539	7399	138	1002	7329	13192	16
					2		3658	5562	780	188	510	7771	145	606	7698	13856	
					3		3967	6033		204	553	8429	157	657	8349	15028	
					4		3888	6112							8444	15200	
					5	526	3684	5790							8000	14400	
"	"	126	1	1	1	433	3675	5431	461	146					7589	13660	16
					2		3841	5677	482	153					7933	14279	
					3		4036	5954		161					8335	15002	
					4		3982	6018							8398	15117	
					5	460	3799	5741							8012	14421	
"	"	127	1	1	1	508	3578	5315	599	207					7412	13342	16
					2		3769	5600	631	218					7809	14056	
					3		4023	5977		233					8335	15003	
					4		3948	6052							8423	15162	
					5	550	3731	5719							7961	14329	
"	"	292	1	2	1	360	3616	5564	460	176	546	7706	138	974	7789	14020	7
					2		3751	5772	477	183	525	7994	143	678	8080	14544	
					3		3939	6061		192	551	8395	150	712	8485	15272	
					4		3878	6122							8556	15401	
					5	383	3730	5887							8228	14811	
"	YELLOW CREEK	128	1	1	1	341	3466	5118	1075	70	522	7162	145	1026	7128	12830	16
					2		3588	5299	1113	72	501	7415	150	749	7380	13284	
					3		4037	5963		81	564	8343	169	843	8304	14948	
					4		3962	6058							8403	15126	
					5	389	3807	5804							8077	14539	
COSHOCTON	ADAMS	291	1	2	1	458	3918	4749	875	536	540	6751	124	1174	6878	12380	2
					2		4106	4977	917	562	512	7075	130	804	7208	12974	
					3		4521	5479		619	564	7789	143	885	7936	14284	
					4		4377	5623							8105	14589	
					5	523	4148	5329							7681	13826	
"	CLARK	290	1	2	1	530	3908	4947	615	372	550	6959	112	1392	7084	12751	2
					2		4127	5284	649	393	518	7348	118	974	7480	13464	
					3		4413	5587		420	554	7858	126	1042	7999	14398	
					4		4313	5687							8115	14607	
					5	580	4063	5357							7645	13761	
"	"	340	1	2	1	640	3792	5249	319	201	567	7272	125	1516	7325	13185	2
					2		4051	5608	341	215	530	7769	133	1012	7826	14086	
					3		4194	5806		223	549	8042	138	1048	8102	14583	
					4		4139	5861							8163	14693	
					5	671	3861	5468							7616	13708	
"	CRAWFORD	289	1	2	1	470	3920	4481	1129	560	523	6478	112	1198	6594	11869	2
					2		4113	4702	1185	588	494	6797	118	818	6919	12454	
					3		4656	5334		667	560	7711	134	928	7849	14128	
					4		4505	5495							8046	14482	
					5	555	4255	5190							7599	13678	
"	FRANKLIN	393	1	2	1	433	4111	4897	559	400	541	7142	122	1236	7269	13084	2
					2		4297	5119	584	418	515	7465	128	890	7598	13676	
					3		4564	5436		444	547	7928	136	945	8069	14524	
					4		4468	5532							8186	14735	
					5	472	4257	5271							7801	14041	
"	JACKSON	392	1	2	1	532	4093	4745	630	422	550	6929	124	1345	7086	12755	2
					2		4323	5012	665	446	519	7318	131	921	7484	13471	
					3		4631	5369		478	556	7839	140	987	8017	14431	
					4		4528	5472							8145	14661	
					5	585	4263	5152							7669	13804	
"	KEENE	391	1	2	1	540	3992	4960	508	318	558	7090	124	1402	7194	12949	2
					2		4220	5243	537	336	526	7495	131	975	7605	13689	
					3		4459	5541		355	556	7921	138	1030	8037	14466	
					4		4377	5623							8134	14641	
					5	582	4123	5295							7660	13788	
"	LINTON	388	1	2	1	437	4097	4930	536	361	556	7134	128	1285	7247	13045	2
					2		4284	5155	561	377	530	7460	134	938	7578	13640	
					3		4539	5461		399	562	7903	142	994	8028	14451	
					4		4450	5550							8134	14642	
					5	474	4239	5287							7749	13949	
"	"	389	1	2	1	1093	3400	4843	654	203	537	6308	115	2173	6133	11039	2
					2		3817	5437	746	228	467	7081	129	1349	6885	12393	
					3		4125	5875		246	505	7652	139	1458	7440	13392	
					4		4043	5957							7522	13540	
					5	1192	3561	5247							6626	11926	
"	OXFORD	387	1	2	1	444	4071	5040	445	354	563	7265	135	1248	7351	13231	2
					2		4260	5274	456	370	527	7603	141	893	7693	13847	
					3		4468	5532		388	553	7974	148	937	8069	14524	
					4		4385	5615							8167	14701	
					5	476	4176	5348							7777	13999	
"	VIRGINIA	386	1	2	1	512	3899	4887	702	387	545	6949	120	1297	7066	12719	2
					2		4109	5151	740	408	514	7324	127	887	7447	13405	
					3		4437	5563		441	555	7909	137	958	8042	14476	
					4		4350	5670							8170	14706	
					5	557	4085	5348							7707	13873	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
								MIDDLE KITTANNING (CON.)									
COSHOCTON	WHITE EYES	472	1	2	1	5.32	37.59	48.69	8.60	4.36	5.32	67.41	1.18	13.13	6828	12290	2
					2		39.49	51.43	9.08	4.60	5.00	71.20	1.25	8.87	7212	12982	
					3		43.43	56.57		5.06	5.50	78.31	1.37	9.76	7932	14278	
					4		42.12	57.88							8082	14547	
					5	6.02	39.59	54.39							7594	13669	
"	"	484	1	2	1	4.50	38.73	50.80	5.97	3.63	5.53	70.94	1.30	12.63	7173	12911	2
					2		40.65	53.20	6.25	3.80	5.27	74.28	1.36	9.04	7511	13519	
					3		43.25	56.75		4.05	5.62	79.24	1.45	9.64	8012	14420	
					4		42.27	57.73							8123	14622	
					5	4.92	40.19	54.89							7724	13904	
GALLIA	GREENFIELD	483	1	2	1	8.08	37.53	45.87	8.52	3.64	5.48	65.71	1.18	15.47	6717	12091	6
					2		40.83	49.90	9.27	3.96	4.98	71.49	1.28	9.02	7307	13153	
					3		45.00	55.00		4.36	5.49	78.80	1.41	9.94	8054	14497	
					4		43.85	56.15							8196	14753	
					5	9.10	39.86	51.04							7451	13412	
HOCKING	GREEN	482	1	2	1	6.55	37.30	49.18	6.97	2.57	5.45	68.40	1.18	15.43	6901	12422	2
					2		39.91	52.63	7.46	2.75	5.05	73.19	1.26	10.29	7385	13293	
					3		43.13	56.87		2.97	5.46	79.09	1.36	11.12	7980	14365	
					4		42.26	57.74							8082	14548	
					5	7.19	39.22	53.59							7501	13501	
"	STARR	481	1	2	1	6.52	38.30	47.15	8.03	3.52	5.49	67.33	1.20	14.43	6850	12330	2
					2		40.97	50.84	8.59	3.77	5.10	72.03	1.28	9.23	7328	13190	
					3		44.82	55.18		4.12	5.58	78.80	1.40	10.10	8017	14429	
					4		43.74	56.26							8148	14666	
					5	7.89	40.56	52.15							7553	13596	
"	WARD	478	1	2	1	7.40	34.17	53.43	5.00	1.06	5.55	70.58	1.32	16.49	7027	12649	2
					2		36.90	57.70	5.40	1.14	5.11	76.22	1.43	10.70	7589	13660	
					3		39.01	60.99		1.21	5.40	80.57	1.51	11.31	8022	14440	
					4		38.50	61.50							8079	14542	
					5	7.87	35.47	56.66							7443	13398	
"	"	479	1	2	1	7.45	35.01	52.73	4.81	.66	5.53	71.04	1.43	16.53	7057	12703	2
					2		37.83	56.97	5.20	.71	5.08	76.76	1.54	10.71	7625	13725	
					3		39.91	60.09		.75	5.36	80.97	1.62	11.30	8043	14478	
					4		39.50	60.50							8091	14564	
					5	7.89	36.38	55.73							7453	13416	
"	"	480	1	2	1	7.55	34.03	52.57	5.85	.77	5.52	70.05	1.42	16.39	6950	12510	2
					2		36.81	56.86	6.33	.83	5.06	75.77	1.54	10.47	7518	13532	
					3		39.30	60.70		.89	5.40	80.89	1.64	11.18	8026	14446	
					4		38.80	61.20							8084	14552	
					5	8.10	35.65	56.25							7429	13373	
"	"	527	1	1	1	1.02	3.54	4.91	.53	.06	.57	6.86	.14	1.84	6717	12090	48
					2		3.94	5.47	.59	.06	.51	7.63	.16	1.05	7478	13460	
					3		4.19	5.81		.07	.54	8.12	.17	1.10	7947	14310	
					4		4.15	5.85							7997	14395	
					5	1.09	3.69	5.22							7132	12837	
"	"	527	2	1	1	.92	3.33	4.69	1.06	.05	.55	6.52	.13	1.69	6367	11460	48
					2		3.66	5.17	1.17	.05	.49	7.18	.14	.97	7011	12620	
					3		4.15	5.85		.06	.55	8.13	.16	1.10	7940	14290	
					4		4.07	5.93							8034	14462	
					5	1.04	3.66	5.30							7197	12954	
"	"	527	3	1	1	1.04	3.55	4.65	.76	.14	.55	6.45	.14	1.96	6283	11310	48
					2		3.96	5.19	.85	.15	.49	7.19	.16	1.16	7011	12620	
					3		4.33	5.67		.17	.53	7.86	.17	1.27	7662	13790	
					4		4.26	5.74							7744	13940	
					5	1.14	3.77	5.09							6861	12349	
"	"	568	1	1	1	.972	3.244	5.341	4.43	.54	5.70	69.50	1.25	18.58	6804	12247	7
					2		3.593	5.916	4.91	.60	5.12	76.99	1.38	11.00	7537	13567	
					3		3.779	6.221		.63	5.38	80.97	1.45	11.57	7926	14268	
					4		3.740	6.260							7970	14345	
					5	1.024	3.358	5.618							7152	12874	
HOLMES	CLARK	477	1	2	1	5.84	4.029	4.860	5.27	2.65					7093	12767	28
					2		4.279	5.161	5.60	2.82					7533	13559	
					3		4.533	5.467		2.99					7980	14363	
					4		4.460	5.540							8067	14521	
					5	6.29	4.180	5.191							7559	13607	
"	WALNUT CREEK	476	1	2	1	7.31	3.492	5.356	4.21	1.00	5.42	70.62	1.44	17.31	6952	12514	2
					2		3.768	5.778	4.54	1.08	4.97	76.19	1.56	11.66	7500	13500	
					3		3.947	6.053		1.13	5.21	79.82	1.63	12.21	7857	14142	
					4		3.903	6.097							7904	14228	
					5	7.70	3.602	5.628							7296	13133	
JEFFERSON	SALINE	122	1	1	1	2.64	3.675	4.946	11.15	2.07	5.26	71.04	1.49	8.99	7158	12884	16
					2		3.775	5.080	11.45	2.13	5.10	72.97	1.53	6.82	7352	13234	
					3		4.263	5.737		2.41	5.76	82.40	1.73	7.70	8303	14945	
					4		4.162	5.838							8435	15183	
					5	3.04	4.035	5.661							8178	14721	
"	SPRINGFIELD	117 A	1	1	1	3.5	3.77	5.08	.80	.30					7367	13260	30
					2		3.91	5.26	.83	.31					7634	13741	
					3		4.26	5.74		.34					8325	14985	
					4		4.17	5.83							8450	15210	
					5	.39	4.00	5.61							8117	14610	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B t u	Year
		1	2	3	4												
MIDDLE KITTANNING (CON.)																	
JEFFERSON	SPRINGFIELD	117 B	1	1	1	32	382	502	84	36					7300	13140	30
					2		395	518	87	37					7541	13574	
					3		433	567		41					8259	14867	
					4		420	580							8394	15110	
					5	36	406	558							8094	14570	
"	"	117 C	1	1	1	34	375	509	82	35					7367	13260	30
					2		388	527	85	36					7626	13727	
					3		424	576		39					8334	15002	
					4		413	587							8472	15250	
					5	38	397	565							8150	14670	
"	"	117 D	1	1	1	39	376	504	82	21					7333	13200	30
					2		390	525	85	22					7631	13736	
					3		426	574		24					8340	15012	
					4		418	582							8450	15210	
					5	43	400	557							8083	14550	
"	"	117 E	1	1	1	36	381	500	83	25					7350	13230	30
					2		395	519	86	26					7624	13724	
					3		432	568		28					8342	15015	
					4		424	576							8461	15220	
					5	40	407	553							8122	14620	
"	"	117 F	1	1	1	37	376	518	69	33					7428	13370	30
					2		390	538	72	34					7713	13883	
					3		420	580		37					8311	14960	
					4		411	589							8428	15170	
					5	41	394	565							8083	14550	
"	"	117 K	1	1	1	36	377	507	80	29	56	717	14	104	7350	13230	30
					2		391	526	83	30	54	743	15	75	7624	13724	
					3		426	574		33	59	810	16	82	8314	14966	
					4		416	584							8439	15190	
					5	40	400	560							8100	14580	
LAWRENCE	PERRY	475	1	2	1	664	3428	4816	1092	332	516	6495	123	1442	6626	11927	7
					2		3672	5158	1170	355	473	6957	132	913	7097	12775	
					3		4159	5841		402	536	7879	149	1034	8037	14468	
					4		4023	5977							8194	14749	
					5	769	3713	5518							7564	13615	
MAHONING	GREEN	471	1	2	1	504	4014	5131	351	106	542	7414	141	1446	7426	13366	21
					2		4227	5403	370	112	513	7807	149	1049	7819	14075	
					3		4389	5611		116	533	8107	155	1089	8119	14616	
					4		4353	5647							8165	14697	
					5	527	4124	5349							7734	13922	
"	"	473	1	2	1	523	3686	5319	472	217	550	7384	141	1236	7502	13504	7
					2		3889	5613	498	229	519	7791	149	814	7916	14249	
					3		4093	5907		241	546	8199	157	857	8331	14996	
					4		4025	5975							8411	15139	
					5	558	3801	5641							7942	14295	
MONROE	JACKSON	581 1	3	3	1	122	2213	2200	5465	212					3439	6190	51
					2		2240	2228	5532	215					3482	6267	
					3		5013	4987		481					7793	14026	
					4		4380	5620							8758	15765	
					5	306	4248	5446							8490	15282	
"	"	581 2	3	3	1	127	2958	3770	3145	396					5508	9914	51
					2		2996	3719	3185	401					5578	10042	
					3		4396	5604		588					8185	14735	
					4		4071	5929							8624	15524	
					5	199	3990	5811							8453	15215	
"	"	581 3	3	3	1	135	3666	5022	1177	339					7336	13204	51
					2		3716	5091	1193	344					7436	13384	
					3		4219	5781		391					8443	15197	
					4		4087	5913							8613	15503	
					5	158	4023	5819							8477	15259	
MUSKINGUM	ADAMS	474	1	2	1	553	4470	4484	483	332	569	7141	125	1350	7206	12971	17
					2		4737	4751	512	351	537	7567	133	900	7635	13743	
					3		4993	5007		370	566	7975	140	949	8047	14485	
					4		4923	5077							8145	14661	
					5	606	4624	4770							7653	13775	
"	BRUSH CREEK	468	1	2	1	565	4436	4285	714	443	564	6835	102	1342	6960	12528	17
					2		4701	4542	757	470	531	7244	108	890	7377	13278	
					3		5086	4914		508	574	7838	117	963	7981	14365	
					4		4989	5011							8120	14616	
					5	629	4676	4695							7609	13696	
"	"	470	1	2	1	508	3975	4540	977	554	532	6574	114	1249	6802	12244	2
					2		4188	4783	1029	584	501	6925	120	841	7166	12899	
					3		4668	5332		651	568	7720	134	937	7988	14379	
					4		4520	5480							8175	14715	
					5	588	4254	5158							7694	13850	
"	"	558	1	1	1	410	3836	3817	1937	604	487	5831	105	1036	5962	10731	50
					2		4000	3980	2020	630	460	6080	110	700	6217	11190	
					3		5013	4987		789	576	7620	138	877	7791	14023	
					4		4800	5200							8086	14555	
					5	541	4540	4919							7648	13766	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
									MIDDLE KITTANNING (CON.)								
MUSKINGUM	CLAY	559	1	1	1	4.00	40.70	42.53	12.77	5.18	5.05	64.22	1.06	11.72	6480	11664	50
					2		42.40	44.30	13.30	5.40	4.80	66.90	1.10	8.50	6750	12150	
					3		48.90	51.10		6.23	5.54	77.16	1.27	9.80	7785	14014	
					4		47.39	52.61							7984	14371	
					5	4.80	45.11	50.09							7601	13682	
"	HARRISON	469	1	2	1	4.67	40.32	45.18	9.83	4.10	5.38	67.71	1.16	11.82	6873	12371	2
					2		42.30	47.39	10.31	4.30	5.10	71.03	1.21	8.05	7210	12978	
					3		47.16	52.84		4.79	5.69	79.19	1.35	8.98	8039	14470	
					4		45.96	54.04							8197	14755	
					5	5.36	43.49	51.15							7757	13963	
"	MADISON	465	1	2	1	6.13	44.25	44.42	5.20	3.64	5.76	70.02	1.22	14.16	7108	12794	17
					2		47.14	47.32	5.54	3.88	5.41	74.59	1.30	9.28	7572	13629	
					3		49.90	50.10		4.11	5.73	78.96	1.38	9.82	8016	14428	
					4		49.13	50.87							8123	14622	
					5	6.54	45.87	47.49							7584	13652	
"	"	466	1	2	1	4.62	40.95	47.85	6.58	4.49	5.47	69.58	1.30	12.58	7126	12827	2
					2		42.93	50.17	6.90	4.71	5.20	72.95	1.36	8.88	7471	13448	
					3		46.11	53.89		5.06	5.59	78.35	1.46	9.54	8025	14445	
					4		45.01	54.99							8159	14687	
					5	5.11	42.72	52.17							7743	13937	
"	"	467	1	2	1	4.75	39.88	46.09	9.28	5.35	5.35	66.69	1.28	12.05	6854	12337	2
					2		41.87	48.39	9.74	5.62	5.06	70.02	1.34	8.22	7196	12952	
					3		46.39	53.61		6.23	5.61	77.57	1.48	9.11	7973	14350	
					4		44.96	55.04							8148	14667	
					5	5.46	42.51	52.03							7704	13867	
"	MONROE	462	1	2	1	5.88	43.81	46.51	3.80	2.98	5.74	72.18	1.27	14.03	7308	13154	17
					2		46.55	49.41	4.04	3.17	5.41	76.68	1.35	9.35	7764	13975	
					3		48.51	51.49		3.30	5.64	79.91	1.41	9.74	8091	14563	
					4		47.88	52.12							8175	14715	
					5	6.24	44.89	48.87							7665	13797	
"	"	463	1	2	1	5.52	44.73	45.12	4.63	3.50	5.66	70.90	1.11	14.20	7241	13034	17
					2		47.34	47.76	4.90	3.70	5.35	75.04	1.18	9.83	7664	13795	
					3		49.78	50.22		3.89	5.63	78.90	1.24	10.34	8059	14506	
					4		49.06	50.94							8159	14686	
					5	5.93	46.16	47.91							7676	13816	
"	MUSKINGUM	464	1	2	1	5.55	40.27	48.95	5.23	3.63	5.57	70.54	1.26	13.77	7191	12944	2
					2		42.63	51.83	5.54	3.84	5.24	74.69	1.33	9.36	7614	13705	
					3		45.13	54.87		4.07	5.55	79.06	1.41	9.91	8061	14509	
					4		44.23	55.77							8168	14703	
					5	6.01	41.58	52.41							7677	13819	
"	NEWTON	461	1	2	1	5.02	38.16	47.26	9.56	5.97	5.29	65.88	1.12	12.18	6758	12164	2
					2		40.18	49.76	10.06	6.29	4.98	69.36	1.18	8.13	7115	12807	
					3		44.67	55.33		6.99	5.54	77.12	1.31	9.04	7911	14239	
					4		43.02	56.98							8101	14581	
					5	5.81	40.52	53.67							7631	13735	
"	WASHINGTON	460	1	2	1	5.44	39.15	46.13	9.28	3.77	5.34	67.16	1.18	13.27	6822	12280	2
					2		41.40	48.79	9.81	3.99	5.01	71.02	1.25	8.92	7214	12985	
					3		45.90	54.10		4.42	5.55	78.75	1.39	9.89	7999	14397	
					4		44.74	55.26							8144	14660	
					5	6.19	41.98	51.83							7642	13755	
"	WAYNE	459	1	2	1	5.93	45.69	42.54	5.84	3.71	5.67	67.21	1.24	16.33	7067	12721	17
					2		48.56	45.23	6.21	3.94	5.32	71.45	1.32	11.76	7512	13522	
					3		51.78	48.22		4.20	5.67	76.18	1.41	12.54	8009	14417	
					4		51.01	48.99							8124	14623	
					5	6.47	47.72	45.81							7598	13677	
PERRY	BEARFIELD	458	1	2	1	5.90	36.58	47.42	10.10	4.96	5.26	65.43	1.22	13.03	6686	12035	2
					2		38.87	50.40	10.73	5.27	4.90	69.53	1.29	8.28	7105	12789	
					3		43.54	56.46		5.90	5.49	77.88	1.45	9.28	7959	14326	
					4		41.99	58.01							8137	14647	
					5	6.83	39.12	54.05							7582	13648	
"	CLAYTON	457	1	2	1	6.72	38.30	48.34	6.64	2.43	5.61	68.45	1.29	15.58	6903	12425	2
					2		41.07	51.82	7.11	2.60	5.22	73.38	1.39	10.30	7400	13320	
					3		44.21	55.79		2.80	5.62	78.99	1.50	11.09	7966	14340	
					4		43.42	56.58							8062	14512	
					5	7.34	40.22	52.44							7471	13448	
"	"	553 A	1	3	1	5.29	39.93	38.83	15.95	1.72					6327	11389	51
					2		42.16	41.00	16.84	1.82					6680	12025	
					3		50.70	49.30		2.19					8033	14460	
					4		49.60	50.40							8204	14768	
					5	6.46	46.40	47.14							7674	13813	
"	"	553 B	1	3	1	5.12	34.56	39.13	21.09	1.24					5821	10478	51
					2		36.53	41.24	22.23	1.31					6135	11043	
					3		46.97	53.03		1.68					7889	14200	
					4		45.47	54.53							8102	14584	
					5	6.69	42.43	50.88							7560	13608	
"	"	553 C	1	3	1	5.75	33.54	36.11	24.60	3.17					5464	9834	51
					2		35.59	38.31	26.10	3.36					5797	10434	
					3		48.16	51.84		4.55					7844	14119	
					4		45.96	54.04							8152	14673	
					5	8.02	42.27	49.71							7498	13497	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B. t. u.	Year
								MIDDLE KITTANNING (CON.)									
PERRY	CLAYTON	553 D	1	3	1	543	3452	3896	2109	179					5811	10461	51
					2		3650	4120	2230	189					6145	11061	
					3		4698	5302		243					7909	14236	
					4		4535	5465							8137	14646	
					5	712	4213	5075							7558	13604	
"	"	553 K	1	3	1	540	3566	3826	2068	198					5856	10541	51
					2		3770	4044	2186	209					6190	11142	
					3		4825	5175		267					7922	14259	
					4		4667	5333							8149	14669	
					5	705	4337	4958							7576	13636	
"	"	602 A1	1	3	1	320	4385	4574	721	465					7067	12722	53
					2		4530	4785	745	480					7301	13143	
					3		4895	5105		519					7889	14201	
					4		4790	5210							8026	14447	
					5	357	4619	5024							7739	13931	
"	"	602 A2	1	3	1	270	4119	5104	507	180					7280	13105	53
					2		4233	5246	521	185					7482	13469	
					3		4466	5534		195					7893	14209	
					4		4410	5590							7961	14329	
					5	289	4283	5428							7731	13915	
"	"	602 A3	1	3	1	280	3717	4047	1956	155					6072	10931	53
					2		3824	4164	2012	159					6247	11246	
					3		4787	5213		199					7820	14079	
					4		4651	5349							8016	14428	
					5	359	4484	5157							7728	13911	
"	"	602 A9	1	3	1	320	4018	4577	1085	268					6761	12170	53
					2		4151	4728	1121	277					6985	12572	
					3		4675	5325		312					7867	14159	
					4		4574	5426							7998	14396	
					5	359	4405	5236							7703	13865	
"	"	602 B1	1	3	1	372	4056	3651	1911	1182					5909	10636	53
					2		4213	3802	1985	1228					6137	11047	
					3		5256	4744		1532					7657	13783	
					4		4962	5038							8072	14529	
					5	511	4708	4781							7659	13787	
"	"	602 B2	1	3	1	464	4004	4136	1396	379					6355	11439	53
					2		4199	4337	1464	397					6664	11996	
					3		4919	5081		465					7807	14053	
					4		4784	5216							7992	14386	
					5	560	4516	4924							7544	13580	
"	"	602 B3	1	3	1	304	3091	3093	3512	185					4721	8499	53
					2		3188	3190	3622	191					4869	8765	
					3		4998	5002							7634	13743	
					4		4716	5284							8050	14490	
					5	498	4481	5021							7649	13769	
"	"	602 B9[19]	1	3	1	395	3871	3744	1990	707					5874	10575	53
					2		4030	3898	2072	737					6116	11010	
					3		5083	4917		928					7714	13887	
					4		4852	5148							8037	14467	
					5	529	4596	4875							7610	13698	
"	HARRISON	454		1	2	1	640	3800	4802	758	272	549	6806	126	1489	6867	12361	2
						2		4060	5130	810	290	511	7271	135	983	7337	13206	
						3		4418	5582		316	556	7911	147	1070	7984	14370	
						4		4327	5673							8093	14568	
						5	709	4019	5272							7520	13536	
"	"	455		1	2	1	570	3883	4702	845	338	537	6777	118	1385	6851	12332	2
						2		4118	4986	896	358	503	7187	125	931	7265	13077	
						3		4523	5477		393	553	7894	137	1023	7980	14364	
						4		4418	5582							8110	14598	
						5	640	4135	5225							7591	13664	
"	"	456		1	2	1	721	3760	4993	526	234	560	6977	126	1577	7008	12614	2
						2		4052	5381	557	252	517	7519	136	1009	7553	13595	
						3		4296	5704		267	548	7971	144	1070	8007	14412	
						4		4223	5777							8091	14563	
						5	775	3896	5329							7463	13433	
"	MONROE	450		1	2	1	679	3545	5185	591	100	549	7030	130	1600	6983	12569	2
						2		3804	5562	634	107	508	7542	139	1070	7492	13485	
						3		4061	5939		114	542	8054	148	1142	7999	14398	
						4		4009	5991							8061	14510	
						5	730	3715	5555							7473	13452	
"	"	487		1	2	1	650	4062	4520	758	260					6871	12367	30
						2		4349	4839	812	278					7356	13241	
						3		4733	5267		303					8006	14411	
						4		4652	5348							8114	14606	
						5	730	4312	4958							7522	13539	
"	PIKE	123 A	1	1	1	887	3932	4781	400	174							5
					2		4315	5246	439	192							
					3		4513	5487		201							
					4		4462	5538									
					5	956	4044	5080									

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								MIDDLE KITTANNING (CON.)									
PERRY	PIKE	123 B	1	1	1	892	3858	4665	585	300					6849	12328	5
					2		4236	5122	642	329					7520	13536	
					3		4527	5473		352					8036	14465	
					4		4441	5559							8141	14653	
					5	959	4011	5020							7351	13232	
"	"	452	1	2	1	525	3885	4604	986	343	538	6605	118	1410	6773	12191	2
					2		4100	4859	1041	362	507	6971	124	995	7148	12866	
					3		4576	5424		404	566	7781	138	1111	7979	14361	
					4		4462	5538							8122	14620	
					5	600	4195	5205							7634	13742	
"	"	453 A	1	2	1	700	3712	4893	695	233	558	6829	126	1559	6880	12384	2
					2		3991	5262	747	251	516	7343	135	1008	7398	13316	
					3		4313	5687		271	558	7936	146	1089	7995	14391	
					4		4231	5769							8093	14567	
					5	767	3907	5326							7472	13449	
"	"	453 B	1	1	1	48	437	467	48	25	57	716	14	140	7239	13030	28
					2		459	491	50	26	55	752	14	103	7600	13680	
					3		483	517		28	58	792	15	107	8006	14410	
					4		478	522							8089	14560	
					5	51	453	496							7672	13810	
"	SALT LICK	124 A	1	1	1	1078	3486	4823	613	111					6663	11993	5
					2		3907	5406	687	124					7468	13442	
					3		4195	5805		133					8019	14434	
					4		4138	5862							8089	14560	
					5	1162	3657	5181							7149	12868	
"	"	124 B	1	1	1	979	3574	4846	601	143							5
					2		3962	5372	656	159							
					3		4245	5755		170							
					4		4183	5817									
					5	1056	3741	5203									
"	"	451	1	2	1	776	3350	5127	747	145	546	6830	118	1614	6772	12190	2
					2		3632	5558	810	157	499	7404	128	1002	7342	13216	
					3		3952	6048		171	543	8057	139	1090	7989	14381	
					4		3877	6123							8074	14534	
					5	851	3547	5602							7387	13296	
STARK	LEXINGTON	449	1	2	1	599	3905	5014	482	361	556	7182	133	1286	7314	13165	7
					2		4154	5333	513	384	521	7639	141	802	7780	14004	
					3		4379	5621		405	549	8052	149	845	8201	14761	
					4		4287	5713							8309	14957	
					5	645	4011	5344							7773	13991	
"	NIMISHILLEN	448	1	2	1	565	3851	4576	1008	413	529	6692	119	1239	6868	12362	7
					2		4082	4850	1068	438	494	7093	126	781	7279	13102	
					3		4570	5430		490	553	7942	141	874	8149	14669	
					4		4441	5559							8317	14970	
					5	651	4151	5198							7776	13997	
"	SANDY	301 B^{20}	1	2	1	649	4026	4654	661	193					6942	12495	26
					2		4305	4988	707	207					7423	13362	
					3		4633	5367		223					7988	14379	
					4		4566	5434							8074	14534	
					5	707	4244	5049							7503	13506	
"	"	446	1	2	1	656	3624	4888	822	266	537	6894	120	1361	6977	12559	7
					2		3882	5237	881	285	496	7386	128	824	7475	13455	
					3		4257	5743		313	544	8099	140	904	8197	14755	
					4		4158	5842							8318	14972	
					5	743	3850	5407							7699	13859	
TUSCARAWAS	AUBURN	444	1	2	1	430	4007	4800	763	397	541	6939	128	1232	7001	12602	2
					2		4187	5016	797	415	515	7251	134	888	7316	13169	
					3		4550	5450		461	560	7878	146	965	7950	14309	
					4		4441	5559							8081	14546	
					5	480	4228	5292							7693	13847	
"	BUCKS	443	1	2	1	519	4079	4815	587	355	559	7012	136	1351	7122	12820	2
					2		4302	5079	619	374	529	7395	143	940	7512	13522	
					3		4586	5414		399	564	7883	152	1002	8008	14414	
					4		4496	5504							8118	14612	
					5	566	4242	5192							7659	13786	
"	CLAY	442	1	2	1	341	3973	4748	938	488	523	6877	130	1044	6971	12548	2
					2		4114	4915	971	505	502	7120	135	767	7217	12991	
					3		4556	5444		569	556	7886	150	849	7993	14388	
					4		4421	5579							8159	14687	
					5	391	4247	5362							7840	14112	
"	DOVER	440	1	2	1	494	3620	4936	950	419	514	6754	130	1233	6856	12341	2
					2		3808	5193	999	441	483	7107	137	833	7214	12985	
					3		4231	5769		490	537	7896	152	925	8015	14426	
					4		4092	5908							8171	14708	
					5	565	3862	5573							7708	13875	
"	"	441	1	2	1	352	4025	5022	601	317	541	7213	128	1200	7297	13135	2
					2		4172	5205	623	329	520	7476	133	919	7563	13613	
					3		4449	5551		351	555	7972	142	980	8065	14517	
					4		4363	5637							8169	14704	
					5	384	4195	5421							7856	14141	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ash	Ultimate analysis: Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B t u	Year
								MIDDLE KITTANNING (CON')									
TUSCARAWAS	FAIRFIELD	438	1	2	1	7.15	38.34	49.95	4.56	2.62	5.64	71.29	1.23	14.66	7194	12949	7
					2		41.29	53.80	4.91	2.82	5.22	76.78	1.32	8.95	7748	13946	
					3		43.42	56.58		2.97	5.49	80.74	1.39	9.41	8148	14666	
					4		42.70	57.30							8234	14821	
					5	7.64	39.43	52.93							7605	13689	
"	"	439	1	2	1	4.66	39.25	49.87	6.22	3.28	5.48	70.80	1.28	12.94	7097	12775	2
					2		41.17	52.31	6.52	3.44	5.21	74.26	1.34	9.23	7444	13399	
					3		44.04	55.96		3.68	5.57	79.45	1.43	9.87	7963	14334	
					4		43.13	56.87							8069	14525	
					5	5.09	40.93	53.98							7659	13786	
"	GOSHEN	437	1	2	1	3.51	41.60	47.20	7.69	4.56	5.45	70.26	1.22	10.82	7153	12875	2
					2		43.11	48.92	7.97	4.73	5.24	72.82	1.26	7.98	7413	13343	
					3		46.84	53.16		5.14	5.69	79.13	1.37	8.67	8055	14499	
					4		45.70	54.30							8201	14761	
					5	3.94	43.90	52.16							7878	14180	
"	JEFFERSON	436	1	2	1	4.72	40.30	49.51	5.47	4.05	5.53	71.08	1.32	12.55	7199	12958	2
					2		42.30	51.96	5.74	4.25	5.26	74.60	1.38	8.77	7555	13599	
					3		44.88	55.12		4.51	5.58	79.15	1.46	9.30	8015	14427	
					4		43.89	56.11							8131	14636	
					5	5.14	41.63	53.23							7714	13885	
"	LAWRENCE	445	1	2	1	4.69	39.57	46.68	9.06	4.70	5.30	67.59	1.24	12.11	6881	12386	2
					2		41.53	48.97	9.50	4.94	5.01	70.92	1.30	8.33	7220	12996	
					3		45.89	54.11		5.46	5.54	78.36	1.44	9.20	7978	14360	
					4		44.58	55.42							8139	14650	
					5	5.35	42.19	52.46							7703	13866	
"	MILL	435	1	2	1	3.78	38.27	49.53	8.42	3.83	5.26	70.31	1.22	10.96	7101	12782	2
					2		39.77	51.48	8.75	3.98	5.03	73.07	1.27	7.90	7380	13284	
					3		43.58	56.42		4.36	5.51	80.08	1.39	8.66	8088	14558	
					4		42.41	57.59							8227	14809	
					5	4.26	40.61	55.13							7877	14179	
"	SALEM	434	1	2	1	3.45	40.02	48.86	7.67	5.22	5.30	70.02	1.26	10.53	7135	12843	2
					2		41.45	50.61	7.94	5.41	5.09	72.52	1.30	7.74	7390	13302	
					3		45.02	54.98		5.88	5.53	78.77	1.41	8.41	8027	14449	
					4		43.70	56.30							8185	14733	
					5	3.88	42.01	54.11							7868	14162	
"	SANDY	433	1	2	1	4.92	38.13	49.91	7.04	2.91	5.40	70.45	1.28	12.92	7082	12748	2
					2		40.10	52.50	7.40	3.06	5.11	74.10	1.34	8.99	7448	13406	
					3		43.30	56.70		3.30	5.52	80.02	1.45	9.71	8043	14477	
					4		42.38	57.62							8152	14673	
					5	5.42	40.09	54.49							7711	13880	
"	UNION	114 A	1	1	1	5.4	40.2	47.8	6.6	2.5					7150	12870	31
					2		42.6	50.5	7.0	2.6					7558	13605	
					3		45.7	54.3		2.8					8127	14629	
					4		44.9	55.1							8222	14800	
					5	5.9	42.3	51.8							7739	13930	
"	"	114 B	1	1	1	4.7	41.1	47.4	6.8	2.9					7194	12950	31
					2		43.1	49.8	7.1	3.0					7549	13589	
					3		46.4	53.6		3.2					8127	14628	
					4		45.6	54.4							8239	14830	
					5	5.2	43.2	51.6							7811	14060	
"	"	114 K	1	1	1	5.1	40.6	47.6	6.7	2.7	5.6	7.18	1.3	11.9	7189	12940	31
					2		42.8	50.2	7.0	2.8	5.2	75.6	1.4	8.0	7572	13630	
					3		46.0	54.0		3.1	5.6	81.4	1.5	8.4	8150	14670	
					4		45.2	54.8							8256	14860	
					5	5.6	42.7	51.7							7794	14030	
"	"	432	1	2	1	3.81	38.71	51.47	6.01	3.24	5.41	72.30	1.36	11.68	7306	13151	2
					2		40.24	53.51	6.25	3.36	5.19	75.16	1.41	8.63	7595	13671	
					3		42.92	57.08		3.58	5.54	80.17	1.50	9.21	8101	14582	
					4		42.01	57.99							8207	14773	
					5	4.15	40.27	55.58							7867	14160	
"	WARWICK	431	1	2	1	4.10	41.54	49.05	5.21	3.25	5.57	72.45	1.42	12.10	7331	13196	2
					2		43.42	51.15	5.43	3.38	5.34	75.55	1.48	8.82	7644	13759	
					3		45.91	54.09		3.57	5.65	79.89	1.56	9.33	8083	14549	
					4		45.12	54.88							8182	14727	
					5	4.43	43.12	52.45							7821	14077	
"	YORK	430	1	2	1	3.18	43.56	46.33	6.93	4.12	5.50	71.13	1.28	11.04	7305	13149	2
					2		44.99	47.85	7.16	4.25	5.32	73.46	1.32	8.49	7545	13581	
					3		48.46	51.54		4.58	5.73	79.13	1.42	9.14	8127	14628	
					4		47.50	52.50							8259	14866	
					5	3.52	45.83	50.65							7967	14341	
'INTON	BROWN	426	1	2	1	8.58	40.53	40.36	10.53	4.07	5.55	62.97	1.33	15.55	6322	11379	25
					2		44.33	44.15	11.52	4.45	5.03	68.88	1.45	8.67	6915	12447	
					3		50.10	49.90		5.03	5.68	77.85	1.64	9.80	7815	14068	
					4		48.91	51.09							7979	14363	
					5	9.93	44.06	46.01							7187	12936	
"	"	427	1	2	1	7.83	41.71	44.73	5.73	2.66	5.74	68.68	1.53	15.66	6779	12202	25
					2		45.25	48.53	6.22	2.89	5.28	74.51	1.66	9.44	7355	13239	
					3		48.25	51.75		3.08	5.63	79.45	1.77	10.07	7843	14117	
					4		47.55	52.45							7934	14281	
					5	8.48	43.52	48.00							7261	13069	

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
MIDDLE KITTANNING (CON.)																	
VINTON	BROWN	428	1	2	1	989	3814	4358	839	325	559	6456	147	1674	6387	11496	25
					2		4232	4836	932	361	498	7165	163	881	7088	12758	
					3		4667	5333		398	549	7901	180	972	7816	14069	
					4		4563	5437							7945	14301	
					5	1109	4057	4834							7063	12713	
"	"	429	1	2	1	832	3946	4352	870	338	553	6542	138	1559	6502	11704	25
					2		4304	4747	949	369	503	7136	150	893	7092	12766	
					3		4755	5245		408	556	7883	166	987	7836	14105	
					4		4652	5348							7968	14343	
					5	938	4215	4847							7221	12998	
LOWER KITTANNING																	
CARROLL	WASHINGTON	580		4	1	295	4243	5017	445	190					7700	13860	
					2		4372	5169	459	196					7934	14281	
					3		4582	5418		205					8316	14968	
					4		4530	5470							8386	15094	
					5	313	4388	5299							8122	14620	
COLUMBIANA	CENTER	314	1	2	1	253	4366	4624	757	502	538	7064	113	1026	7372	13270	21
					2		4480	4744	776	515	524	7248	117	820	7564	13615	
					3		4857	5143		558	568	7858	127	889	8200	14760	
					4		4744	5256							8358	15044	
					5	285	4608	5107							8121	14618	
"	KNOX	313	1	2	1	455	4260	4533	752	424	538	6857	124	1305	7119	12815	21
					2		4463	4750	787	444	511	7184	130	944	7458	13425	
					3		4844	5156		482	555	7797	141	1025	8095	14572	
					4		4741	5259							8236	14825	
					5	508	4501	4991							7819	14074	
"	LIVERPOOL	140	1	1	1	266	4173	4399	1162	803					7085	12753	16
					2		4287	4519	1194	825					7278	13100	
					3		4868	5132		937					8265	14876	
					4		4677	5323							8537	15366	
					5	320	4527	5153							8264	14875	
"	ST. CLAIR	136	1	1	1	403	3669	5303	625	261	546	7465	164	939	7496	13493	16
					2		3823	5526	651	272	522	7779	171	805	7811	14060	
					3		4089	5911		291	558	8321	183	647	8355	15039	
					4		4003	5997							8457	15222	
					5	439	3828	5733							8086	14554	
"	"	315	1	2	1	367	3768	5181	684	250	531	7313	120	1102	7414	13345	21
					2		3912	5378	710	260	509	7591	125	805	7696	13853	
					3		4211	5789		280	548	8170	135	867	8284	14912	
					4		4127	5873							8387	15096	
					5	402	3961	5637							8050	14490	
"	YELLOW CREEK	142	1	1	1	267	3846	5019	868	571					7340	13212	16
					2		3951	5157	892	587					7541	13574	
					3		4338	5662		644					8280	14903	
					4		4183	5817							8467	15241	
					5	305	4056	5639							8209	14776	
"	"	143	1	1	1	446	4086	4973	495	352					7540	13572	16
					2		4277	5205	518	368					7892	14206	
					3		4511	5489		388					8323	14982	
					4		4426	5574							8432	15178	
					5	481	4212	5307							8027	14448	
COSHOCTON	LAFAYETTE	390	1	2	1	560	3469	4643	1328	487	495	6159	108	1423	6222	11200	2
					2		3675	4918	1407	516	459	6524	114	980	6591	11864	
					3		4277	5723		601	534	7592	133	1140	7670	13807	
					4		4094	5906							7866	14159	
					5	675	3818	5507							7336	13204	
HOLMES	KILLBUCK	312	1	2	1	758	4077	4358	807	394	558	6588	133	1520	6693	12048	28
					2		4411	4716	873	486	513	7128	144	916	7242	13036	
					3		4853	5167		467	562	7809	158	1004	7935	14283	
					4		4727	5273							8074	14534	
					5	851	4325	4824							7388	13298	
"	WALNUT CREEK	311	1	2	1	634	4321	4406	639	365					6973	12551	28
					2		4613	4705	682	390					7444	13400	
					3		4951	5049		419					7989	14381	
					4		4865	5135							8107	14593	
					5	696	4527	4777							7543	13578	
JACKSON	MILTON	310	1	2	1	839	3518	4901	742	265	547	6663	137	1646	6772	12189	7
					2		3840	5350	810	289	496	7273	150	982	7392	13306	
					3		4178	5822		314	540	7914	163	1069	8044	14479	
					4		4082	5918							8155	14679	
					5	927	3703	5370							7399	13318	
"	"	561 D	1	1	1	938	3674	4686	762	408					6610	11898	5
					2		4054	5105	841	450					7294	13129	
					3		4426	5574		491					7964	14335	
					4		4304	5696							8106	14590	
					5	1048	3853	5099							7257	13062	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Volatile	Fixed carbon	Ultimate analysis: Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Heat value: Calories	B t u	Year
								LOWER KITTANNING (CON.)									
JACKSON	MILTON	561 E	1	1	1	895	3782	4389	934	441							5
					2		4154	4820	1026	484							
					3		4629	5371		539							
					4		4496	5504									
					5	1023	4036	4941									
JEFFERSON	KNOX	309	1	2	1	246	3848	5166	740	382	538	7420	127	793	7591	13664	7
					2		3945	5296	759	392	524	7607	130	588	7782	14008	
					3		4259	5731		424	567	8232	141	636	8421	15159	
					4		4158	5842							8559	15407	
					5	274	4044	5682							8325	14985	
"	SALINE	144	1	1	1	344	3717	4671	1268	730					6907	12433	16
					2		3849	4838	1313	756					7154	12877	
					3		4431	5569		870					8235	14823	
					4		4214	5786							8503	15306	
					5	418	4039	5543							8147	14665	
"	"	145	1	1	1	221	3963	4750	1066	496	528	7104	134	672	7236	13025	16
					2		4053	4857	1090	507	514	7265	137	487	7400	13320	
					3		4549	5451		569	577	8153	154	547	8305	14949	
					4		4404	5596							8496	15293	
					5	258	4290	5452							8277	14899	
LAWRENCE	ELIZABETH	308	1	2	1	807	3454	4768	971	213	544	6554	123	1595	6626	11926	7
					2		3757	5187	1056	232	494	7129	134	955	7207	12973	
					3		4201	5799		259	552	7971	150	1068	8058	14505	
					4		4100	5900							8180	14724	
					5	913	3726	5361							7433	13379	
"	UPPER	146	1	2	1	757	3851	4513	879	320	559	6671	127	1444	6777	12199	7
					2		4166	4883	951	346	514	7218	137	834	7332	13197	
					3		4604	5396		382	568	7977	151	922	8103	14584	
					4		4499	5501							8238	14829	
					5	853	4116	5031							7537	13566	
MUSKINGUM	NEWTON	306	1	2	1	796	3918	4687	599	240	554	6840	137	1630	6893	12407	17
					2		4257	5092	651	261	506	7431	149	1002	7489	13480	
					3		4553	5447		279	541	7949	159	1072	8010	14419	
					4		4480	5520							8102	14584	
					5	863	4093	5044							7403	13325	
"	WASHINGTON	305	1	2	1	505	3975	4743	777	480	537	6807	118	1281	6983	12569	2
					2		4186	4996	818	506	507	7169	124	876	7354	13237	
					3		4559	5441		551	552	7808	135	954	8009	14416	
					4		4433	5567							8162	14691	
					5	568	4182	5250							7699	13858	
"	WAYNE	304	1	2	1	587	4152	4391	870	479	538	6667	116	1330	6771	12188	7
					2		4411	4665	924	509	503	7083	123	859	7193	12947	
					3		4860	5140		561	553	7804	136	946	7925	14265	
					4		4739	5261							8084	14552	
					5	667	4423	4910							7546	13583	
PERRY	PIKE	302	1	2	1	674	3705	4909	712	258	547	6834	124	1525	6885	12393	2
					2		3973	5264	765	277	506	7328	133	993	7382	13288	
					3		4301	5699		300	548	7933	144	1075	7992	14386	
					4		4212	5788							8096	14572	
					5	742	3900	5358							7496	13493	
"	"	303	1	2	1	685	3522	4777	1016	472	526	6478	122	1386	6591	11864	2
					2		3781	5128	1091	507	483	6954	131	834	7075	12735	
					3		4244	5756		569	542	7806	147	936	7941	14295	
					4		4086	5914							8117	14610	
					5	793	3752	5445							7474	13453	
STARK	SANDY	301 A[21]	1	2	1	381	4434	4580	605	344					7268	13083	26
					2		4609	4761	630	358					7556	13601	
					3		4919	5081		382					8064	14515	
					4		4840	5160							8174	14713	
					5	416	4639	4945							7833	14099	
TUSCARAWAS	"	562 A	1	1	1	561	3625	4942	872	289							6
					2		3840	5236	924	306							
					3		4231	5769		337							
					4		4125	5875									
					5	630	3865	5505									
"	"	562 B	1	1	1	446	3989	4711	854	373					7136	12845	6
					2		4175	4931	894	390					7469	13444	
					3		4585	5415		428					8202	14764	
					4		4476	5524							8346	15022	
					5	503	4250	5247							7926	14267	
"	"	562 C	1	2	1	530	3873	4826	771	325	546	6975	118	1265	7168	12902	7
					2		4090	5096	814	343	514	7366	125	838	7569	13624	
					3		4452	5548		373	560	8019	136	912	8240	14831	
					4		4352	5648							8367	15061	
					5	590	4095	5315							7874	14173	

ANALYSES OF OHIO COALS

County	Township	File number	Kind	Source	Condition	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
		1	2	3	4												
										CLARION							
JACKSON	BLOOMFIELD	371	1	2	1	5.31	37.33	43.82	13.54	6.08	4.98	62.05	1.23	12.12	6394	11509	99
					2		39.42	46.28	14.30	6.42	4.64	65.53	1.30	7.81	6753	12154	
					3		46.00	54.00		7.49	5.41	76.47	1.52	9.11	7880	14182	
					4		44.07	55.93							8113	14604	
					5	6.47	41.22	52.31							7588	13659	
"	MADISON	370	1	2	1	4.90	35.75	45.65	13.70	6.14	4.89	62.57	1.23	11.47	6460	11628	99
					2		37.59	48.00	14.41	6.46	4.57	65.79	1.29	7.48	6793	12227	
					3		43.92	56.08		7.55	5.34	76.86	1.51	8.74	7937	14286	
					4		41.85	58.15							8176	14717	
					5	5.99	39.35	54.66							7686	13835	
"	MILTON	366	1	2	1	4.71	40.51	46.17	8.61	3.73	5.44	67.51	1.26	13.45	6911	12440	99
					2		42.51	48.45	9.04	3.91	5.16	70.85	1.32	9.72	7253	13055	
					3		46.73	53.27		4.30	5.67	77.89	1.45	10.69	7974	14352	
					4		45.66	54.34							8111	14599	
					5	5.31	43.24	51.45							7679	13822	
"	"	367	1	2	1	5.33	41.01	45.26	8.40	3.72	5.50	66.52	1.28	14.58	6825	12285	99
					2		43.32	47.81	8.87	3.93	5.19	70.26	1.35	10.40	7209	12976	
					3		47.54	52.46		4.31	5.70	77.10	1.48	11.41	7911	14239	
					4		46.50	53.50							8044	14480	
					5	6.00	43.71	50.29							7562	13612	
"	"	369	1	2	1	5.51	38.92	47.38	8.09	3.70	5.47	67.30	1.28	14.16	6863	12353	99
					2		41.23	50.20	8.57	3.92	5.14	71.29	1.36	9.72	7271	13087	
					3		45.09	54.91		4.29	5.62	77.97	1.49	10.63	7953	14314	
					4		44.00	56.00							8084	14552	
					5	6.29	41.23	52.48							7576	13637	
"	"	561 A	1	1	1	7.50	39.25	42.74	10.51	5.44							5
					2		42.43	46.21	11.36	5.88							
					3		47.87	52.13		6.63							
					4		46.36	53.64									
					5	8.76	42.50	48.94									
"	"	561 B	1	1	1	8.45	41.27	43.55	6.73	3.10					6805	12249	5
					2		45.08	47.57	7.35	3.39					7433	13379	
					3		48.56	51.34		3.66					8023	14440	
					4		47.82	52.18							8136	14645	
					5	9.28	43.39	47.33							7381	13286	
"	"	561 C	1	2	1	4.98	39.71	45.51	9.80	4.08	5.39	66.14	1.28	13.31	6801	12242	99
					2		41.79	47.90	10.31	4.29	5.09	69.61	1.35	9.35	7157	12883	
					3		46.59	53.41		4.78	5.68	77.61	1.51	10.42	7980	14364	
					4		45.37	54.63							8136	14645	
					5	5.71	42.78	51.51							767	1380	
"	"	607 A	1	3	1	3.65	43.47	45.01	7.87	4.92					6911	12440	54
					2		45.12	46.71	8.17	5.11					7173	12911	
					3		49.13	50.87		5.56					7811	14060	
					4		48.01	51.99							7957	14322	
					5	4.11	46.03	49.86							7629	13733	
"	"	607 B[22]	1	3	1	3.64	42.10	43.53	10.73	4.86					6691	12045	54
					2		43.69	45.17	11.14	5.04					6944	12500	
					3		49.17	50.83		5.67					7815	14067	
					4		47.87	52.13							7987	14376	
					5	4.25	45.83	49.92							7647	13765	
"	"	608	1	3	1	3.36	40.75	45.47	10.42	3.07					6800	12240	54
					2		42.17	47.05	10.78	3.18					7036	12666	
					3		47.27	52.73		3.56					7886	14196	
					4		46.23	53.77							8023	14441	
					5	3.86	44.44	51.70							7713	13883	
LAWRENCE	DECATUR	363	1	2	1	6.11	38.43	45.52	9.94	3.61	5.42	65.53	1.22	14.28	6643	11957	1
					2		40.93	48.48	10.59	3.85	5.05	69.79	1.30	9.42	7075	12735	
					3		45.78	54.22		4.31	5.65	78.08	1.45	10.54	7913	14243	
					4		44.59	55.41							8061	14509	
					5	7.00	41.47	51.53							7496	13493	
"	"	364	1	2	1	6.34	35.30	40.95	17.41	5.29	4.91	57.92	1.07	13.40	5967	10741	1
					2		37.69	43.72	18.59	5.65	4.49	61.84	1.14	8.29	6371	11468	
					3		46.30	53.70		6.94	5.52	75.96	1.40	10.18	7826	14087	
					4		44.19	55.81							8090	14562	
					5	8.10	40.61	51.29							7434	13382	
"	"	365	1	2	1	5.86	37.25	41.61	15.88	5.36	5.06	60.22	1.18	12.90	6185	11133	1
					2		39.57	44.20	16.23	5.69	4.86	63.96	1.25	8.19	6570	11826	
					3		47.24	52.76		6.79	5.59	76.35	1.49	9.78	7843	14117	
					4		45.37	54.63							8082	14547	
					5	7.28	42.06	50.66							7494	13489	
"	WASHINGTON	362	1	2	1	6.00	39.16	42.98	11.86	5.10	5.26	63.32	1.22	13.24	6519	11734	1
					2		41.66	45.72	12.62	5.43	4.88	67.36	1.30	8.41	6935	12485	
					3		47.68	52.32		6.22	5.58	77.09	1.49	9.62	7937	14286	
					4		46.15	53.85							8136	14645	
					5	7.11	42.86	50.03							7557	13603	

County	Township	File number	Kind	Source	Condition	Proximate analysis			Ultimate analysis						Heat value		Year
						Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B. t. u.	
		1	2	3	4												
CLARION (CON.)																	
MUSKINGUM	HOPEWELL	361	1	2	1	6.89	41.49	42.92	8.70	3.02	5.57	67.28	1.19	14.24	6706	12071	17
					2		44.56	46.10	9.34	3.24	5.16	72.26	1.28	8.72	7202	12964	
					3		49.15	50.85		3.57	5.69	79.71	1.41	9.62	7944	14300	
					4		48.24	51.76							8070	14526	
					5	7.75	44.50	47.75							7446	13402	
SCIOTO	BLOOM	360	1	2	1	6.80	37.92	45.94	9.34	3.45	5.33	65.30	1.23	15.35	6577	11839	1
					2		40.69	49.29	10.02	3.70	4.91	70.06	1.32	9.99	7057	12703	
					3		45.22	54.78		4.11	5.46	77.86	1.47	11.10	7829	14118	
					4		44.07	55.93							7981	14365	
					5	7.73	40.66	51.61							7364	13255	
VINTON	ELK	359	1	2	1	4.95	39.17	46.56	9.32	3.53	5.40	67.17	1.30	13.28	6914	12445	1
					2		41.21	48.98	9.81	3.71	5.10	70.67	1.37	9.34	7274	13093	
					3		45.69	54.31		4.11	5.65	78.36	1.52	10.36	8065	14517	
					4		44.57	55.43							8208	14774	
					5	5.63	42.06	52.31							7746	13943	
"	MADISON	357	1	2	1	5.02	39.90	46.11	8.97	3.32	5.48	67.92	1.33	12.98	6960	12528	1
					2		42.01	48.55	9.44	3.50	5.18	71.51	1.40	8.97	7328	13190	
					3		46.39	53.61		3.86	5.72	78.96	1.55	9.91	8092	14565	
					4		45.35	54.65							8228	14810	
					5	5.67	42.78	51.55							7762	13971	
"	"	358	1	2	1	4.80	40.56	42.21	12.43	3.51	4.96	65.56	1.21	12.33	6567	11821	22
					2		42.60	44.34	13.06	3.69	4.65	68.87	1.27	8.46	6898	12417	
					3		49.00	51.00		4.24	5.35	79.22	1.46	9.73	7934	14282	
					4		47.79	52.21							8103	14586	
					5	5.67	45.08	49.25							7643	13758	
"	SWAN	356	1	2	1	4.90	39.16	45.79	10.15	4.25	5.40	66.26	1.23	12.71	6845	12321	2
					2		41.18	48.15	10.67	4.47	5.11	69.67	1.29	8.79	7198	12956	
					3		46.10	53.90		5.00	5.72	78.00	1.44	9.84	8058	14504	
					4		44.80	55.20							8223	14802	
					5	5.65	42.27	52.08							7759	13966	
"	VINTON	354	1	2	1	5.02	40.31	46.52	8.15	2.87	5.49	68.52	1.28	13.69	6961	12530	99
					2		42.44	48.98	8.58	3.02	5.19	72.14	1.35	9.72	7329	13192	
					3		46.42	53.58		3.30	5.68	78.91	1.48	10.63	8017	14430	
					4		45.52	54.48							8134	14641	
					5	5.60	42.97	51.43							7678	13821	
"	"	355	1	2	1	4.61	41.35	42.94	11.10	5.28	5.36	64.91	1.30	12.05	6760	12168	99
					2		43.35	45.01	11.54	5.54	5.08	68.05	1.36	8.33	7087	12756	
					3		49.06	50.94		6.27	5.75	77.01	1.54	9.43	8021	14436	
					4		47.64	52.36							8216	14789	
					5	5.12	45.06	49.52							7771	13987	
"	WILKESVILLE	119 A	1	1	1	6.19	40.01	45.54	7.66	3.34					6952	12514	5
					2		42.92	48.86	8.22	3.58					7458	13424	
					3		46.76	53.24		3.90					8126	14626	
					4		45.80	54.20							8253	14856	
					5	7.55	42.35	50.10							7631	13736	
"	"	119 B	1	1	1	7.38	41.60	44.86	6.16	2.77							5
					2		44.92	48.43	6.65	2.99							
					3		48.12	51.88		3.20							
					4		47.37	52.63									
					5	8.04	43.56	48.40									
"	"	352	1	2	1	4.62	40.10	46.53	8.85	4.23	5.44	67.17	1.28	13.03	6904	12427	99
					2		42.00	48.73	9.27	4.43	5.17	70.35	1.34	9.44	7231	13015	
					3		46.29	53.71		4.88	5.70	77.54	1.48	10.40	7970	14345	
					4		45.10	54.90							8118	14612	
					5	5.13	42.78	52.09							7702	13863	
"	"	353	1	2	1	4.72	39.88	44.19	11.21	4.16	5.36	65.04	1.28	12.95	6744	12139	99
					2		41.86	46.38	11.76	4.37	5.08	68.26	1.34	9.19	7078	12740	
					3		47.44	52.56		4.95	5.76	77.36	1.52	10.41	8021	14438	
					4		46.14	53.86							8194	14749	
					5	5.61	43.60	50.89							7743	13937	
WINTERS																	
JACKSON	MILTON	203	1	2	1	9.31	36.78	47.78	6.13	2.00	5.70	67.80	1.27	17.10	6976	12557	14
					2		40.56	52.68	6.76	2.21	5.14	74.76	1.40	9.73	7692	13846	
					3		43.50	56.50		2.37	5.61	80.18	1.50	10.44	8250	14850	
					4		42.78	57.22							8341	15014	
					5	10.09	38.46	51.45							7499	13499	
VINTON	ELK	201	1	2	1	6.69	35.56	43.95	13.80	1.34	4.98	64.04	1.21	14.63	6250	11251	22
					2		38.11	47.10	14.79	1.44	4.54	68.63	1.30	9.30	6698	12058	
					3		44.72	55.28		1.69	5.33	80.54	1.53	10.91	7861	14151	
					4		43.67	56.33							8000	14400	
					5	7.93	40.21	51.86							7366	13258	
"	MADISON	200	1	2	1	6.06	38.74	46.38	8.82	1.81	5.12	68.54	1.25	14.46	6750	12151	22
					2		41.24	49.37	9.39	1.92	4.74	72.96	1.33	9.66	7185	12935	
					3		45.51	54.49		2.12	5.23	80.52	1.47	10.66	7930	14275	
					4		44.73	55.27							8032	14458	
					5	6.77	41.70	51.53							7488	13479	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
									BROOKVILLE								
JACKSON	JEFFERSON	379	1	2	1	1064	3826	4443	667	117	594	6567	153	1902	6477	11659	28
					2		4281	4973	746	131	533	7349	171	1070	7248	13047	
					3		4626	5374		142	576	7941	185	1156	7832	14099	
					4		4570	5430							7906	14231	
					5	1165	4043	4802							6993	12588	
"	MILTON	378	1	2	1	363	4005	3836	1796	95	536	6386	121	1066	6407	11533	28
					2		4156	3980	1864	99	515	6626	125	771	6648	11967	
					3		5108	4892		122	633	8143	154	948	8171	14709	
					4		5001	4999							8347	15024	
					5	463	4775	4772							7968	14342	
SCIOTO	VERNON	377	1	2	1	903	3794	4417	886	335					6417	11551	28
					2		4171	4855	974	368					7054	12697	
					3		4621	5379		408					7815	14067	
					4		4512	5488							7949	14308	
					5	1019	4052	4929							7139	12850	
STARK	CANTON	376	1	2	1	518	3990	4362	1130	362	521	6529	119	1339	6593	11867	26
					2		4209	4601	1190	382	490	6888	126	924	6953	12515	
					3		4778	5222		434	556	7818	143	1049	7892	14205	
					4		4657	5343							8051	14491	
					5	604	4376	5020							7566	13619	
VINTON	ELK	374	1	2	1	695	3849	4581	875	184	494	6803	123	1521	6684	12031	22
					2		4136	4924	940	198	448	7311	132	971	7183	12930	
					3		4565	5435		219	494	8069	146	1072	7928	14272	
					4		4486	5514							8031	14456	
					5	776	4139	5085							7408	13334	
"	"	375	1	2	1	608	3675	4477	1240	165	483	6645	116	1351	6460	11628	22
					2		3913	4767	1320	176	442	7075	123	864	6878	12381	
					3		4508	5492		203	509	8151	142	995	7924	14264	
					4		4408	5592							8056	14501	
					5	709	4096	5195							7484	13472	
"	MADISON	373	1	2	1	437	3799	4404	1360	201	485	6601	121	1232	6474	11654	22
					2		3973	4605	1422	210	456	6903	127	882	6771	12187	
					3		4632	5368		245	532	8047	148	1028	7893	14207	
					4		4522	5478							8040	14472	
					5	519	4287	5194							7622	13720	
WAYNE	FRANKLIN	372	1	2	1	681	4264	4054	1001	328	555	6453	76	1587	6548	11787	99
					2		4576	4350	1074	352	514	6924	81	1055	7027	12649	
					3		5127	4873		394	576	7757	91	1182	7873	14171	
					4		5030	4970							8014	14426	
					5	779	4638	4583							7389	13301	
									TIONESTA								
MUSKINGUM	WAYNE	217	1	2	1	850	3644	4589	917	130	549	6531	113	1760	6511	11720	17
					2		3983	5015	1002	142	497	7138	123	1098	7116	12809	
					3		4427	5573		158	552	7933	137	1220	7908	14235	
					4		4351	5649							8006	14410	
					5	951	3937	5112							7244	13040	
									BEDFORD								
COSHOCTON	BEDFORD	382	1	2	1	154	4657	3542	1647	374	495	6463	167	854	6591	11864	26
					2		4729	3597	1674	380	486	6561	170	729	6694	12049	
					3		5680	4320		456	584	7880	204	876	8040	14472	
					4		5566	4434							8253	14855	
					5	192	5459	4349							8093	14568	
HOLMES	PRAIRIE	380	1	2	1	802	4097	4493	608	253	500	6758	141	1740	6837	12306	28
					2		4454	4885	661	275	447	7347	153	1117	7433	13379	
					3		4769	5231		294	479	7867	164	1196	7959	14326	
					4		4698	5302							8053	14496	
					5	871	4289	4840							7352	13233	
MUSKINGUM	LICKING	381	1	2	1	556	3949	4493	1002	282	532	6735	125	1324	6719	12094	17
					2		4181	4758	1061	299	498	7131	132	879	7115	12806	
					3		4677	5323		334	557	7978	148	983	7960	14326	
					4		4576	5424							8092	14565	
					5	635	4286	5079							7578	13641	

County	Township	File number	Kind	Source	Condition	Proximate analysis				Ultimate analysis					Heat value		Year
		1	2	3	4	Moisture	Volatile	Fixed carbon	Ash	Sulphur	Hydrogen	Carbon	Nitrogen	Oxygen	Calories	B t u	
UPPER MERCER																	
JACKSON	JEFFERSON	284	1	2	1	951	3898	4681	470	106					6752	12154	28
					2		4307	5174	519	117					7462	13431	
					3		4543	5457		133					7870	14166	
					4		4500	5500							7924	14264	
					5	1008	4047	4945							7126	12827	
LAWRENCE	HAMILTON	282	1	2	1	717	4250	3967	1066	354					6554	11798	28
					2		4578	4274	1148	381					7060	12709	
					3		5172	4828		430					7976	14357	
					4		5068	4932							8133	14640	
					5	829	4648	4523							7460	13428	
SCIOTO	BLOOM	283	1	2	1	1022	4082	4569	327	91	539	6928	153	1962	6894	12409	28
					2		4546	5090	364	101	473	7716	170	1176	7679	13822	
					3		4718	5282		105	491	8008	176	1220	7969	14344	
					4		4687	5313							8010	14418	
					5	1065	4188	4747							7157	12883	
MIDDLE MERCER																	
STARK	TUSCARAWAS	285	1	2	1	354	4038	4235	1373	245	517	6382	87	1396	6401	11521	26
					2		4186	4391	1423	254	494	6617	90	1122	6636	11944	
					3		4880	5120		296	576	7715	105	1308	7737	13926	
					4		4770	5230							7887	14197	
					5	422	4570	5008							7554	13598	
BEAR RUN																	
SCIOTO	BLOOM	383	1	2	1	1044	3620	4484	852	103					6352	11434	28
					2		1042	5007	951	115					7092	12767	
					3		4467	5533		127					7837	14109	
					4		4400	5600							7925	14265	
					5	1157	3891	4952							7008	12615	
QUAKERTOWN																	
HOLMES	MONROE	229	1	2	1	643	4069	4684	604	248					7024	12643	28
					2		4348	5006	646	265					7506	13511	
					3		4648	5352		283					8024	14444	
					4		4576	5424							8117	14611	
					5	698	4257	5045							7551	13591	
JACKSON	COAL	228	1	2	1	1128	3641	5064	167	64	558	7052	139	2020	6761	12171	25
					2		4104	5708	188	72	488	7949	157	1146	7621	13719	
					3		4183	5817		73	497	8102	160	1168	7767	13982	
					4		4161	5839							7791	14023	
					5	1153	3681	5166							6892	12406	
"	MILTON	226	1	2	1	929	3296	5426	349	125					6960	12528	14
					2		3633	5982	385	138					7673	13811	
					3		3778	6222		144					7980	14364	
					4		3730	6270							8029	14453	
					5	972	3369	5659							7248	13047	
"	"	227	1	2	1	974	3550	4924	552	128	536	6754	143	1887	6553	11796	25
					2		3933	5455	612	142	474	7483	158	1131	7260	13069	
					3		4189	5811		151	505	7971	168	1205	7733	13921	
					4		4133	5867							7797	14035	
					5	1044	3701	5255							6983	12570	
MUSKINGUM	JACKSON	225	1	2	1	980	3512	4910	598	137	579	6878	121	1687	6745	12142	17
					2		3894	5443	663	152	521	7625	134	905	7478	13460	
					3		4171	5829		163	558	8166	144	969	8009	14416	
					4		4109	5891							8082	14547	
					5	1056	3675	5269							7229	13012	
VINTON	ELK	171	3	4	1	656	3440	5400	494	128					7462	13431	27
					2		3686	5785	529	137					7994	14389	
					3		3892	6108		145					8441	15193	
					4		3837	6163							8506	15311	
					5	709	3564	5727							7903	14226	
"	"	224	1	2	1	1112	3690	4642	556	58	575	6734	152	1925	6623	11921	25
					2		4152	5222	626	65	509	7577	171	1052	7452	13413	
					3		4429	5571		69	543	8084	182	1122	7950	14309	
					4		4388	5612							8003	14406	
					5	1187	3867	4946							7053	12695	

County	Township	File number 1	Kind 2	Source 3	Condition 4	Proximate analysis: Moisture	Proximate analysis: Volatile	Proximate analysis: Fixed carbon	Ultimate analysis: Ash	Ultimate analysis: Sulphur	Ultimate analysis: Hydrogen	Ultimate analysis: Carbon	Ultimate analysis: Nitrogen	Ultimate analysis: Oxygen	Heat value: Calories	Heat value: B. t. u.	Year
								QUAKERTOWN (CON.)									
VINTON	HARRISON	223	1	2	1	1138	3879	4573	410	86	578	6735	152	2039	6553	11795	25
					2		4377	5150	463	97	510	7600	172	1158	7394	13310	
					3		4589	5411		102	535	7969	180	1214	7753	13956	
					4		4553	5447							7799	14038	
					5	1197	4008	4795							6866	12358	
								SHARON									
JACKSON	LIBERTY	178 A	1	1	1	1360	3175	5042	423	86					6491	11684	7
					2		3675	5835	490	99					7513	13523	
					3		3864	6136		104					7900	14220	
					4		3819	6181							7949	14309	
					5	1432	3272	5296							6811	12259	
"	"	178 B	1	1	1	1277	3151	4794	778	97					6259	11266	7
					2		3612	5496	892	111					7175	12915	
					3		3966	6034		122					7878	14180	
					4		3895	6105							7959	14327	
					5	1402	3350	5248							6843	12318	
"	LICK	221	1	2	1	1158	3303	4874	655	47	527	6625	130	2006	6337	11407	25
					2		3736	5512	762	53	450	7493	147	1105	7167	12901	
					3		4040	5960		57	487	8102	159	1195	7750	13950	
					4		3990	6010							7809	14057	
					5	1251	3491	5258							6833	12299	
"	"	222	1	2	1	1075	3538	4888	499	47	533	6797	142	1982	6496	11692	25
					2		3964	5477	559	53	464	7616	159	1149	7278	13100	
					3		4199	5801		56	491	8068	168	1217	7709	13876	
					4		4161	5839							7754	13957	
					5	1139	3688	5173							6871	12367	
PORTAGE	DEERFIELD	115 A	1	4	1	74	369	494	63	15	56	702	13	151	7000	12600	43
					2		399	533	68	17	51	758	14	92	7561	13610	
					3		428	572		18	55	814	15	98	8111	14600	
					4		421	579							8189	14740	
					5	80	388	532							7533	13560	
"	"	115 B	1	4	1	89	339	498	74	16	55	682	14	159	6778	12200	43
					2		373	546	81	17	50	749	15	88	7439	13390	
					3		406	594		19	54	815	16	96	8094	14570	
					4		397	603							8189	14740	
					5	98	358	544							7389	13300	
"	PALMYRA	220	1	2	1	1519	3449	4753	279	62	623	6733	96	2207	6687	12036	26
					2		4067	5604	329	73	535	7939	113	1011	7884	14192	
					3		4205	5795		75	553	8210	117	1045	8152	14675	
					4		4177	5823							8188	14738	
					5	1572	3520	4908							6901	12422	
STARK	LAWRENCE	219	1	2	1	656	4009	4972	363	87					7336	13205	26
					2		4280	5321	389	93					7850	14130	
					3		4464	5536		97					8168	14702	
					4		4430	5570							8211	14780	
					5	686	4127	5187							7648	13767	
"	TUSCARAWAS	218	1	2	1	529	4226	4867	378	76	562	7255	108	1621	7152	12874	26
					2		4462	5138	400	79	531	7660	114	1216	7551	13593	
					3		4648	5352		82	553	7979	119	1267	7866	14159	
					4		4618	5382							7906	14230	
					5	554	4362	5084							7467	13441	

TABLE 3.—*Major and minor element composition, whole-coal basis, by county*
(significant figures consistent only with data supplied by the U.S. Geological Survey; J. H. Medlin, oral communication, 1977)

Key to symbols:
Type:
1 - bed sample
2 - benched sample
3 - stockpile sample
* - composite of 778A-C
† - composite of 779 B and C

B - no data available
G - greater than the value shown
L - less than the value shown

Sulfur content calculated from SO_3 content of 525°C ash. Values for S should be taken from the proximate-ultimate analyses (tables 1, 2).

Township	Seam	OGS file no.	Type	Si (%)	Al (%)	Ca (%)	Mg (%)	Na (%)	K (%)	Fe (%)	Ti (%)	P (ppm)	S (%)	Cl (%)
BELMONT COUNTY														
Colerain	Waynesburg (No. 11)	788	3	5.6	2.2	0.040	0.13	0.039	0.52	3.4	0.14	1000L	0.10	0.05L
		789A	2	4.8	2.7	0.079	0.12	0.051	0.42	3.0	0.13	970L	0.06	0.04L
		789B	2	4.3	2.0	0.045	0.091	0.035	0.35	1.2	0.10	690L	0.03	0.03L
Goshen		791A	2	5.1	2.3	0.032	0.11	0.062	0.43	0.90	0.13	780L	0.02	0.04L
		791B	2	5.1	3.1	0.12	0.13	0.039	0.51	3.2	0.16	1000L	0.08	0.05L
Kirkwood	Pittsburgh (No. 8)	738A	2	1.9	0.84	0.70	0.279	0.023	0.16	2.5	0.043	580L	0.58	0.03L
		738B	2	1.3	0.68	0.92	0.353	0.018	0.086	1.4	0.030	470L	0.64	0.02L
		738C	2	2.1	0.85	1.4	0.660	0.033	0.20	3.9	0.054	870L	1.1	0.04L
		786A	2	1.5	0.66	0.89	0.050	0.019	0.14	4.8	0.047	690L	0.48	0.03L
		786B	2	4.2	1.9	0.67	0.089	0.032	0.28	2.4	0.11	830L	0.35	0.04L
		786C	2	1.2	0.60	0.46	0.034	0.013	0.087	1.6	0.035	350L	0.19	0.02L
		786D	2	1.9	0.80	0.47	0.040	0.018	0.14	2.3	0.045	470L	0.17	0.02L
		795	1	1.3	0.70	0.65	0.042	0.019	0.11	2.5	0.036	480L	0.27	0.02L
Richland		794	1	2.9	1.1	0.80	0.395	0.025	0.23	1.4	0.063	660L	0.73	0.03L
		799A	2	0.89	0.62	0.15	0.025	0.027	0.079	2.4	0.025	32L	0.07	B
		799B	2	2.5	1.3	0.21	0.057	0.064	0.21	3.1	0.067	61L	0.11	B
		799C	2	0.81	0.55	0.16	0.021	0.032	0.063	3.5	0.022	38L	0.11	B
		799D	2	2.7	1.3	0.23	0.062	0.034	0.24	5.0	0.066	120	0.14	B
		800	1	1.3	0.76	0.27	0.023	0.032	0.094	3.5	0.038	45L	0.07	B
	Waynesburg (No. 11)	778A	2	4.3	1.8	0.074	0.098	0.076	0.39	1.4	0.10	720L	0.05	0.03L
		778B	2	3.0	1.7	0.043	0.074	0.031	0.28	2.0	0.079	610L	0.03	0.03L
		778C	2	3.3	2.0	0.19	0.091	0.043	0.33	1.7	0.10	670L	0.05	0.03L
		778D	2	7.5	3.5	0.10	0.15	0.14	0.45	2.8	0.22	1200L	0.06	0.06L
		778E	*	3.6	1.9	0.15	0.063	0.071	0.33	1.6	0.10	670L	0.07	0.03L
		779A	2	5.0	2.5	0.31	0.142	0.058	0.53	2.2	0.15	1000L	0.11	0.05L
		779B	2	3.8	2.1	0.22	0.096	0.042	0.38	1.2	0.11	710L	0.07	0.03L
		779C	2	3.8	1.5	0.51	0.089	0.046	0.32	1.7	0.082	690L	0.23	0.03L
		779D	†	4.4	2.0	0.22	0.112	0.083	0.43	1.9	0.11	800L	0.12	0.04L
		793A	2	4.3	2.4	0.20	0.10	0.030	0.31	2.2	0.14	870L	0.07	0.04L
		793B	2	3.8	2.3	0.034	0.103	0.043	0.33	1.8	0.11	720L	0.03	0.03L
		793C	2	4.8	1.8	0.040	0.111	0.035	0.35	1.5	0.11	790L	0.04	0.04L
Smith	Pittsburgh (No. 8)	730	1	1.2	0.84	0.29	0.037	0.039	0.10	1.8	0.046	41L	0.03	0.01L
		730A	1	1.5	1.1	0.18	0.041	0.052	0.12	3.5	0.056	59L	0.03	0.01L
Union	Meigs Creek (No. 9)	798	1	2.3	1.2	0.057	0.038	0.020	0.15	1.3	0.051	420L	0.05	0.02L
Washington	Pittsburgh (No. 8)	722	1	1.8	1.1	0.24	0.040	0.035	0.14	2.0	0.056	450L	0.13	0.02L
		723	1	2.2	1.4	0.22	0.054	0.044	0.19	2.4	0.067	560L	0.12	0.03L
		728	1	1.5	1.0	0.33	0.036	0.031	0.11	2.1	0.048	480L	0.13	0.02L
		729	1	1.7	1.1	0.28	0.035	0.030	0.11	3.0	0.055	500L	0.13	0.02L
Wheeling		814	1	3.0	1.5	0.19	0.070	0.046	0.22	2.2	0.081	630L	0.10	0.03L
		815	1	1.6	0.93	0.23	0.037	0.028	0.11	2.2	0.042	430L	0.12	0.02L
York		724	1	2.0	1.3	0.18	0.040	0.044	0.13	2.3	0.063	490L	0.11	0.02L
		725	1	1.6	1.2	0.18	0.032	0.038	0.10	2.2	0.052	440L	0.12	0.02L
COSHOCTON COUNTY														
Franklin	Middle Kittanning (No. 6)	742A	2	0.36	0.24	0.19	0.016	0.016	0.031	1.0	0.019	160L	0.10	0.01L
		742B	2	4.4	2.1	0.093	0.115	0.045	0.37	4.9	0.15	980L	0.19	0.05L
		775A	2	1.8	0.95	0.068	0.048	0.026	0.16	5.4	0.073	660L	0.10	0.03L
		775B	2	0.60	0.36	0.30	0.024	0.026	0.049	2.2	0.033	300L	0.17	0.01L
Linton		781A	2	0.81	0.53	0.23	0.045	0.024	0.066	1.9	0.032	310L	0.17	0.01L
		781B	2	0.42	0.38	0.082	0.019	0.023	0.030	0.86	0.021	160L	0.10	0.01L
		781C	2	2.8	1.9	0.081	0.075	0.034	0.24	5.2	0.097	830L	0.14	0.04L
		782A	2	0.51	0.42	0.20	0.067	0.020	0.043	2.0	0.019	270L	0.19	0.01L
		782B	2	0.78	0.58	0.12	0.045	0.022	0.061	2.2	0.026	320L	0.16	0.01L
		782C	2	6.6	3.8	0.11	0.16	0.065	0.53	2.8	0.24	1300L	0.19	0.06L
Virginia	Lower Kittanning (No. 5)	745A	2	1.5	0.61	1.5	0.020	0.048	0.078	1.4	0.032	140	0.37	B
		745B	2	1.6	0.69	0.18	0.015	0.040	0.068	1.9	0.044	21	0.13	B
		745C	2	2.5	0.84	0.068	0.014	0.065	0.062	2.2	0.083	23	0.10	B
		745D	2	1.4	0.66	0.071	0.023	0.052	0.097	2.4	0.035	4	0.11	B
	Middle Kittanning (No. 6)	739	1	1.0	0.67	0.056	0.014	0.061	0.056	4.0	0.035	8L	0.10	B
		740A	2	0.72	0.45	0.082	0.013	0.031	0.038	2.0	0.024	50	0.10	B
		740B	2	0.35	0.31	0.066	0.009	0.032	0.025	1.4	0.016	6	0.09	B
		740C	2	3.8	2.3	0.066	0.042	0.15	0.23	6.5	0.11	300	0.21	B
GUERNSEY COUNTY														
Oxford	Pittsburgh (No. 8)	803	1	2.2	1.1	0.41	0.050	0.024	0.16	2.0	0.058	71	0.08	B
HARRISON COUNTY														
Athens	Meigs Creek (No. 9)	737A	2	2.0	1.0	0.032	0.037	0.028	0.16	1.6	0.074	450L	0.03	0.02L
		737B	2	4.7	2.2	0.042	0.092	0.040	0.22	0.90	0.14	740L	0.03	0.03L
		784A	2	1.4	0.93	0.040	0.026	0.018	0.11	1.3	0.037	320L	0.04	0.01L
		784B	2	2.6	1.2	0.023	0.033	0.020	0.18	0.60	0.082	430L	0.01L	0.02L
		784C	2	2.5	1.2	0.023	0.035	0.019	0.18	0.62	0.071	430L	0.01	0.02L
		792A	2	2.1	1.2	0.036	0.033	0.018	0.15	2.1	0.062	460L	0.04	0.02L
		792B	2	2.6	1.2	0.023	0.037	0.035	0.16	0.58	0.073	440L	0.01	0.02L
		792C	2	2.2	0.93	0.027	0.034	0.026	0.15	1.8	0.053	430L	0.03	0.02L
Cadiz	Lower Freeport (No. 6A)	736	1	3.6	2.7	0.70	0.059	0.10	0.27	8.5	0.16	1300L	0.29	0.06L
		813	1	1.3	0.93	0.12	0.024	0.031	0.092	2.4	0.061	400L	0.10	0.02L
	Pittsburgh (No. 8)	796	1	2.0	0.89	0.050	0.039	0.026	0.14	2.2	0.046	430L	0.06	0.02L
Greene	Lower Freeport (No. 6A)	718	1	1.0	1.0	0.16	0.016	0.015	0.061	2.3	0.047	380L	0.10	0.02L
		719	1	1.0	0.98	0.18	0.014	0.016	0.058	1.8	0.055	340L	0.08	0.02L
		720	1	1.2	1.1	0.22	0.019	0.033	0.090	2.1	0.070	390L	0.10	0.02L
		721	1	1.1	1.1	0.18	0.020	0.020	0.075	3.0	0.059	450L	0.11	0.02L
		809	1	1.0	0.83	0.21	0.021	0.020	0.077	1.2	0.055	310L	0.13	0.01L
		810	1	1.2	1.0	0.094	0.034	0.024	0.12	1.2	0.048	320L	0.07	0.01L
		811A	2	1.2	1.1	0.33	0.025	0.025	0.10	2.3	0.039	420L	0.20	0.02L
		811B	2	3.4	2.4	0.094	0.082	0.062	0.44	1.2	0.10	660L	0.06	0.03L
		812A	2	1.5	1.4	0.36	0.040	0.035	0.17	2.0	0.055	480L	0.10	0.03L
		812B	2	3.5	2.5	0.23	0.091	0.065	0.44	1.6	0.12	750L	0.10	0.03L
Short Creek	Meigs Creek (No. 9)	797	1	2.5	1.3	0.028	0.052	0.021	0.17	1.2	0.075	450L	0.03	0.02L
JEFFERSON COUNTY														
Mt. Pleasant	Waynesburg (No. 11)	780A	2	3.6	1.9	0.067	0.094	0.030	0.38	3.7	0.10	800L	0.08	0.04L
		780B	2	3.1	1.6	0.025	0.069	0.027	0.29	2.3	0.083	620L	0.03	0.03L
		780C	2	4.8	2.0	0.038	0.10	0.035	0.41	3.0	0.12	860L	0.06	0.04L
		780D	1	3.9	2.0	0.041	0.095	0.037	0.37	3.5	0.11	810L	0.07	0.04L
		787A	2	3.3	1.8	0.062	0.088	0.024	0.32	3.8	0.078	800L	0.08	0.04L
		787B	2	4.1	1.6	0.047	0.097	0.030	0.35	2.1	0.10	770L	0.03	0.04L
		787C	2	6.4	2.2	0.089	0.12	0.045	0.49	2.5	0.14	1000L	0.11	0.05L
		787D	1	4.2	1.9	0.050	0.060	0.031	0.36	3.0	0.098	820L	0.08	0.04L
		790A	2	4.7	2.3	0.21	0.096	0.081	0.32	0.83	0.13	760L	0.17	0.04L
		790B	2	3.4	1.9	0.11	0.073	0.050	0.30	1.1	0.082	600L	0.08	0.03L
Salem	Lower Freeport (No. 6A)	735	1	2.7	1.5	0.24	0.087	0.034	0.30	3.2	0.089	74L	0.03	0.02L
		736A	1	1.6	1.1	0.11	0.029	0.024	0.11	3.9	0.067	58L	0.02	0.02
Wayne	Pittsburgh (No. 8)	785A	2	1.4	0.87	0.054	0.013	0.011	0.026	2.5	0.043	400L	0.06	0.02L
		785B	2	0.81	0.48	0.043	0.013	0.012	0.041	3.2	0.034	360L	0.06	0.02L
		785C	2	0.99	0.52	0.047	0.024	0.014	0.071	1.8	0.030	290L	0.06	0.01L
		785D	2	1.1	0.65	0.040	0.022	0.017	0.10	1.9	0.031	310L	0.03	0.01L
		785E	2	6.9	2.8	0.041	0.12	0.049	0.43	2.3	0.20	1200L	0.021	0.01L
		785F	2	0.92	0.52	0.038	0.021	0.009	0.059	2.7	0.025	330L	0.05	0.02L
		785G	2	2.7	1.1	0.036	0.046	0.021	0.21	1.5	0.076	500L	0.05	0.02L
		785H	1	1.9	0.85	0.041	0.033	0.016	0.11	2.0	0.050	420L	0.05	0.02L
MEIGS COUNTY														
Columbia	Clarion (No. 4A)	804A	2	2.7	1.3	0.25	0.072	0.053	0.23	1.4	0.067	53L	0.13	B
		804B	2	24	9.0	0.10	0.617	0.43	2.0	2.3	0.54	350L	0.16	B
		804C	2	2.3	1.3	0.36	0.044	0.065	0.14	1.5	0.060	49L	0.17	B
		804D	2	5.3	3.2	0.47	0.11	0.080	0.27	2.1	0.20	100L	0.16	B
		805	1	3.9	1.8	0.72	0.108	0.084	0.30	1.3	0.093	76L	0.22	B
Salem		806A	2	2.6	1.5	1.5	0.074	0.11	0.27	4.4	0.085	400	0.54	B
		806B	2	20	9.9	0.056	0.581	0.38	2.0	2.1	0.61	340L	0.11	B
		806C	2	1.3	1.1	0.58	0.040	0.055	0.080	3.8	0.041	62	0.23	B
		806D	2	3.6	2.5	1.2	0.11	0.15	0.37	7.4	0.17	330	0.42	B
MONROE COUNTY														
Salem	Pittsburgh (No. 8)	733	1	2.6	1.5	0.26	0.077	0.044	0.26	3.1	0.069	660L	0.15	0.03L
		734	1	1.8	1.1	0.22	0.045	0.031	0.16	2.6	0.052	490L	0.13	0.02L
Switzerland		726	1	1.7	1.2	0.22	0.035	0.047	0.12	2.0	0.056	450L	0.12	0.02L
		727	1	1.4	1.1	0.16	0.033	0.059	0.091	2.2	0.047	440L	0.11	0.02L
		731	1	1.5	1.2	0.18	0.029	0.033	0.11	1.7	0.044	400L	0.11	0.02L
		732	1	1.6	1.1	0.29	0.032	0.030	0.11	2.7	0.048	490L	0.17	0.02L
MUSKINGUM COUNTY														
Adams	Middle Kittanning (No. 6)	743A	2	0.23	0.21	0.15	0.008	0.026	0.003	1.1	0.009	27	0.12	B
		743B	2	0.56	0.24	0.065	0.041	0.052	0.025	8.8	0.091	66	0.22	B
		743C	2	20	9.8	0.32	0.886	0.44	1.9	1.5	0.58	190	0.50	B
		743D	2	5.0	2.2	1.1	0.138	0.10	0.38	1.3	0.13	96	0.43	B
Monroe		744	1	1.8	1.1	0.063	0.046	0.089	0.18	3.2	0.075	1600G	0.13	B
Washington		801A	2	0.36	0.39	0.074	0.020	0.041	0.018	1.2	0.016	81	0.08	B
		801B	2	3.3	2.3	0.085	0.090	0.14	0.25	4.7	0.11	260	0.13	B
		802A	2	0.27	0.28	0.070	0.024	0.040	0.022	3.3	0.016	26	0.08	B
		802B	2	0.86	0.60	0.064	0.032	0.063	0.067	0.69	0.035	39	0.06	B
		802C	2	6.8	4.1	0.11	0.17	0.19	0.52	4.8	0.24	136	0.17	B
NOBLE COUNTY														
Elk	Brookville (No. 4)	773	1	1.1	0.93	0.20	0.045	0.055	0.073	6.5	0.026	260	0.15	B
	Lower Kittanning (No. 5)	772	1	B	B	B	0.044	0.065	B	B	B	B	B	B
	Middle Kittanning (No. 6)	771	1	2.2	1.2	0.10	0.038	0.072	0.18	1.2	0.063	42	0.07	B
		774	1	1.6	1.0	0.20	0.017	0.070	0.062	2.8	0.064	93	B	B
PERRY COUNTY														
Bearfield		783A	2	7.0	4.3	0.086	0.22	0.16	0.77	8.2	0.27	180L	0.05	0.08L
		783B	2	6.3	3.4	0.086	0.149	0.11	0.43	2.2	0.18	1000L	0.09	0.05L
		783C	2	1.2	0.83	0.14	0.027	0.028	0.083	1.4	0.047	310L	0.05	0.01L
Pike		741	1	3.7	2.4	0.095	0.108	0.10	0.28	3.6	0.15	170	0.17	B
		776A	2	6.7	3.5	0.097	0.15	0.13	0.62	1.7	0.25	1200L	0.07	0.06L
		776B	2	1.6	1.2	0.098	0.058	0.021	0.075	1.5	0.045	400L	0.06	0.02L
		776C	2	2.5	1.6	0.065	0.055	0.045	0.18	2.2	0.12	570L	0.06	0.03L
		776D	2	0.74	0.56	0.075	0.023	0.018	0.069	4.6	0.015	460L	0.08	0.02L
Pleasant		777A	2	4.2	1.9	0.088	0.079	0.039	0.33	3.9	0.13	880L	0.08	0.04L
		777B	2	6.3	3.4	0.077	0.152	0.11	0.50	1.9	0.21	1100L	0.10	0.05L
		777C	2	2.5	2.1	0.14	0.066	0.077	0.24	2.6	0.12	67L	0.03	0.03L
		777D	2	0.52	0.53	0.22	0.027	0.016	0.062	2.0	0.017	27L	0.09	0.01L
		777E	1	2.9	2.1	0.16	0.092	0.040	0.30	2.8	0.13	130	0.08	0.03L
VINTON COUNTY														
Wilkesville	Clarion (No. 4A)	807A	2	2.9	1.7	0.43	0.104	0.130	0.24	1.3	0.094	45	0.20	B
		807B	2	23	12	0.29	0.700	0.42	2.1	1.5	0.64	220	0.49	B
		807C	2	2.1	1.5	0.27	0.080	0.084	0.14	2.0	0.070	25	0.19	B
		807D	2	3.8	2.4	0.40	0.154	0.172	0.34	2.5	0.13	160	0.26	B
		808	1	5.0	2.9	0.45	0.203	0.14	0.47	3.0	0.17	31	0.31	B
WASHINGTON COUNTY														
Liberty	Middle Kittanning (No. 6)	770	1	0.98	0.72	0.17	0.040	0.060	0.052	3.9	0.032	46	B	B

TABLE 4.—*Major and minor element composition, whole-coal basis, by bed*
(significant figures consistent only with data supplied by the U.S. Geological Survey; J. H. Medlin, oral communication, 1977)

Key to symbols:
Type:
1 - bed sample
2 - benched sample
3 - stockpile sample
* - composite of 778A-C
† - composite of 779 B and C

B - no data available
G - greater than the value shown
L - less than the value shown

Sulfur content calculated from SO_3 content of 525°C ash. Values for S should be taken from the proximate-ultimate analyses (tables 1, 2).

County	Township	OGS file no.	Type	Si (%)	Al (%)	Ca (%)	Mg (%)	Na (%)	K (%)	Fe (%)	Ti (%)	P (ppm)	S (%)	Cl (%)
BROOKVILLE (NO. 4) COAL														
Noble	Elk	773	1	1.1	0.93	0.20	0.045	0.055	0.073	6.5	0.026	260	0.15	B
CLARION (NO. 4A) COAL														
Meigs	Columbia	804A	2	2.7	1.3	0.25	0.072	0.053	0.23	1.4	0.067	53L	0.13	B
		804B	2	24	9.0	0.10	0.617	0.43	2.0	2.3	0.54	350L	0.16	B
		804C	2	2.3	1.3	0.36	0.044	0.065	0.14	1.5	0.060	49L	0.17	B
		804D	2	5.3	3.2	0.47	0.11	0.080	0.27	2.1	0.20	100L	0.16	B
		805	1	3.9	1.8	0.72	0.108	0.084	0.30	1.3	0.093	76L	0.22	B
	Salem	806A	2	2.6	1.5	1.5	0.074	0.11	0.27	4.4	0.085	400	0.54	B
		806B	2	20	9.9	0.056	0.581	0.38	2.0	2.1	0.61	340L	0.11	B
		806C	2	1.3	1.1	0.58	0.040	0.055	0.080	3.8	0.041	62	0.23	B
		806D	2	3.6	2.5	1.2	0.11	0.15	0.37	7.4	0.17	330	0.42	B
Vinton	Wilkesville	807A	2	2.9	1.7	0.43	0.104	0.130	0.24	1.3	0.063	660L	0.73	0.03L
		807B	2	23	12	0.29	0.700	0.42	2.1	1.5	0.64	220	0.49	B
		807C	2	2.1	1.5	0.27	0.080	0.084	0.14	2.0	0.070	25	0.19	B
		807D	2	3.8	2.4	0.40	0.154	0.172	0.34	2.5	0.13	160	0.26	B
		808	1	5.0	2.9	0.45	0.203	0.14	0.47	3.0	0.17	31	0.31	B
Richland		794	1	1.1	0.80	0.395	0.025	0.23	1.4	0.063	660L	0.73	0.03L
		799A	2	0.89	0.62	0.15	0.025	0.027	0.079	2.4	0.025	32L	0.07	B
		799B	2	2.5	1.3	0.21	0.057	0.064	0.21	3.1	0.067	61L	0.11	B
		799C	2	0.81	0.55	0.16	0.021	0.032	0.063	3.5	0.022	38L	0.11	B
		799D	2	2.7	1.3	0.23	0.062	0.034	0.24	5.0	0.066	120	0.14	B
		800	1	1.3	0.76	0.27	0.023	0.032	0.094	3.5	0.038	45L	0.07	B
		778A	2	4.3	1.8	0.074	0.098	0.076	0.39	1.4	0.10	720L	0.05	0.03L
		778B	2	3.0	1.7	0.043	0.074	0.031	0.28	2.0	0.079	610L	0.03	0.03L
		778C	2	3.3	2.0	0.19	0.091	0.043	0.33	1.7	0.10	670L	0.05	0.03L
		778D	2	7.5	3.5	0.10	0.15	0.14	0.45	2.8	0.22	1200L	0.06	0.06L
		778E	*	3.6	1.9	0.15	0.063	0.071	0.33	1.6	0.10	670L	0.07	0.03L
		779A	2	5.0	2.5	0.31	0.142	0.058	0.53	2.2	0.15	1000L	0.11	0.05L
		779B	2	3.8	2.1	0.22	0.096	0.042	0.38	1.2	0.11	710L	0.07	0.03L
		779C	2	3.8	1.5	0.51	0.089	0.046	0.32	1.7	0.082	690L	0.23	0.03L
		779D	†	4.4	2.0	0.22	0.112	0.083	0.43	1.9	0.11	800L	0.12	0.04L
		793A	2	4.3	2.4	0.20	0.10	0.030	0.31	2.2	0.14	870L	0.07	0.04L
		793B	2	3.8	2.3	0.034	0.103	0.043	0.33	1.8	0.11	720L	0.03	0.03L
		793C	2	4.8	1.8	0.040	0.111	0.035	0.35	1.5	0.11	790L	0.04	0.04L
Coshocton	Franklin	742A	2	0.36	0.24	0.19	0.016	0.016	0.031	1.0	0.019	160L	0.10	0.01L
		742B	2	4.4	2.1	0.093	0.125	0.045	0.37	4.9	0.15	980L	0.19	0.05L
		775A	2	1.8	0.95	0.068	0.048	0.026	0.16	5.4	0.073	660L	0.10	0.03L
		775B	2	0.60	0.36	0.30	0.024	0.026	0.049	2.2	0.033	300L	0.17	0.01L
	Linton	781A	2	0.81	0.53	0.23	0.045	0.024	0.066	1.9	0.032	310L	0.17	0.01L
		781B	2	0.42	0.38	0.082	0.019	0.023	0.030	0.86	0.021	160L	0.10	0.01L
		781C	2	2.8	1.9	0.081	0.075	0.034	0.24	5.2	0.097	830L	0.14	0.04L
		782A	2	0.51	0.42	0.20	0.067	0.020	0.043	2.0	0.019	270L	0.19	0.01L
		782B	2	0.78

TABLE 7.—*Trace element composition, whole-coal basis, by county*
(significant figures consistent only with data supplied by the U.S. Geological Survey; J. H. Medlin, oral communication, 1977)

Key to symbols:
Type:
1 - bed sample
2 - benched sample
3 - stockpile sample
* - composite of 778A-C
† - composite of 779 B and C

Method (column heads):
DNA - by delayed neutron activation
E - by emission spectrography
NA - by neutron activation
W - by wet chemistry

B - no data available
E - calculated from emission spectrographic data on ash
G - greater than value shown
H - not determined due to interference
L - less than value shown
N - not detected
W - by wet chemistry
X - by X-ray fluorescence on whole coal

All values in parts per million

Township	Seam	OGS file no.	Type	Ag E	As NA	Au E	B E	Ba E	Be E	Bi E	Br NA	Cd W	Ce NA	Co NA	Cr NA	Cs NA	Cu W	Dy E	Er E	Eu E	F W	Ga E	Gd E	Ge E	Hf E	Hg W	Ho E	In E	Ir E	La NA	Li W	Lu E	Mn E	Mo E	Nb E	Nd E	Ni E	Os E	Pb W	Pd E	Pr E	Pt E	Rb NA	Re E	Rh E	Ru E	Sb NA	Sc E	Se NA	Sm E	Sn E	Sr E	Ta E	Tb E	Te E	Th DNA	Tl E	Tm E	U DNA	V E	W E	Y E	Yb E	Zn W	Zr E
BELMONT COUNTY																																																																			
Colerain	Waynesburg (No. 11)	788	3	0.12 L	36	2.4 L	84	86.4	1.9 L	1.2 L	6	0.12 L	23	3.6	23	2.7	8.6	3.6 L	1.2 L	0.48	160	7.2	5.3 L	0.72L	5.3 L	0.15	0.72L	1.2 L	1.7 L	13	29	1.7 L	34	5.8	3.6 L	16 L	9.8	1.7 L	22	0.24 L	2.4 L	1.7 L	52	2.4 L	0.24 L	0.24 L	0.54	4.6	3.8	1.7 L	3.6 L	41	110L	3.6 L	110L	7	1.2 L	0.72L	1.1	34	2.4 L	8.9	0.72	16	70
		789A	2	0.11 L	12	2.2 L	75	95.9	1.6	1.1 L	5	0.11 L	26	4.7	28	2.5	11	3.3 L	2.2	0.44	140	8.0	4.9 L	0.89	4.9 L	0.17	0.67L	1.1 L	1.6 L	15	62	1.6 L	29	1.1	3.3 L	15 L	11	1.6 L	26	0.44 L	3.1	1.6 L	43	2.2 L	0.22 L	0.22 L	0.30	4.2	3.6	1.6 L	3.3 L	80	100L	3.3 L	100L	11	1.1 L	0.67L	0.9	38	2.2 L	8.0	0.67	6.2	49
		789B	2	0.078L	6	1.6 L	72G	70.6	1.4	0.78L	8	0.078L	21	4.1	23	2.3	7.5	2.4 L	1.2	0.31	95	6.3	3.4 L	0.63	3.4 L	0.12	2.4 L	0.78L	1.1 L	12	25	1.1 L	19	0.63	2.7	11 L	12	1.1 L	11	0.16 L	2.0	1.1 L	36	1.6 L	0.16 L	0.16 L	1.1	3.6	2.7	1.1 L	2.4 L	42	72L	2.4 L	72L	9	0.78L	0.47L	0.7	27	1.6 L	5.8	0.94	12	30
Goshen		791A	2	0.089L	11	1.8 L	57	86.0	1.8	0.89L	7	0.089L	22	5.3	25	2.2	7.1	2.7 L	1.6	0.53	160	8.4	3.9 L	1.6	3.9 L	0.19	2.7 L	0.89L	1.2 L	14	52	1.2 L	20	1.4	2.7 L	12 L	12	1.2 L	6.4	0.36 L	1.8 L	1.2 L	38	1.8 L	0.18 L	0.18 L	0.42	3.7	3.5	1.2 L	2.7 L	37	82L	2.7 L	82L	7	0.89L	0.53L	0.9	32	1.8 L	6.6	1.1	11	28
		791B	2	0.12	6	2.4 L	98	172	2.4	1.2 L	6	0.12 L	32	4.2	34	3.2	14	3.6 L	1.2 L	0.24	120	11	5.2 L	6.7	5.2 L	0.090	0.71L	1.2 L	1.7 L	16	57	1.7 L	31	3.1	5.2	16 L	15	1.7 L	24	0.24 L	3.3	1.7 L	55	2.4 L	0.24 L	0.24 L	0.32	6.0	2.6	1.9	3.6 L	150	110L	16 L	110L	14	1.2 L	0.71L	0.9	48	2.4 L	12	1.2	12	86
Kirkwood	Pittsburgh (No. 8)	738A	2	0.066L	32	1.3 L	54	48.2	1.2	0.66L	10	0.079	9	2.5	11	0.8	5.0	2.0 L	0.66L	0.26	85	3.4	2.9 L	6.7	2.9 L	0.092	0.40L	0.66L	0.92L	5	6.9	0.92L	96	0.92	2.0 L	9.0L	5.5	0.92L	2.6 L	0.13 L	1.3 L	0.92L	11	1.3 L	0.13 L	0.13 L	0.28	1.7	1.3	0.92L	2.0 L	40	61L	9.0 L	61L	3L	0.66L	0.40L	2.8	9.5	1.3 L	3.2	0.40	10	33
		738B	2	0.054L	3	1.1 L	49G	18.8	0.21	0.54L	12	0.056	9	1.1	8.1	0.5	4.1	1.6 L	0.54L	0.11 L	61	1.9	1.6 L	0.32L	2.4	0.050	0.32L	0.54L	0.75L	4	5.8	0.75L	200	0.43	1.6 L	7.3L	1.8	0.75L	2.1	0.11 L	1.1	0.75L	7	1.1 L	0.11 L	0.11 L	0.09	0.54	1.0	0.75L	1.6 L	27	49L	7.3 L	54	3L	0.54L	0.32L	7.0	3.8	1.1 L	1.1	0.11	6.8	5.1
		738C	2	0.10 L	110	2.0 L	48	77.8	1.2	1.0 L	9	0.088	10	2.7	13	0.9	6.8	3.0 L	1.0 L	0.20 L	150	4.2	3.0 L	11	4.4 L	0.12	3.0 L	1.0 L	1.4 L	5	6.4	1.4 L	120	1.0	3.0 L	14 L	4.2	1.4 L	4.0 L	0.20 L	2.0 L	1.4 L	17	2.0 L	0.20 L	0.20 L	0.75	1.4	1.0	1.4 L	3.0 L	88	92L	3.0 L	92L	3L	1.0 L	0.60L	1.4	6.6	2.0 L	2.6	0.40	18	36
		786A	2	0.078	8	1.6 L	72G	42.1	1.9	0.78L	5	0.27	9	1.7	12	0.9	4.4	2.4 L	0.78L	0.16 L	59	6.0	3.4 L	0.47	3.4 L	0.14	0.47L	0.78L	1.1 L	5	5.0	1.1 L	220	1.9	2.4 L	11 L	4.4	1.1 L	3.1	0.16 L	1.6 L	1.1 L	14	1.6 L	0.16 L	0.16 L	0.21	1.9	1.3	1.1 L	2.4 L	52	72L	11 L	72L	3L	0.78L	0.47L	0.7	8.3	0.16L	9.1	0.63	8.2	14
		786B	2	0.095	4	1.9 L	87G	61.6	1.5	0.95L	4	0.13	17	3.8	20	1.7	12	2.8 L	0.95L	0.38	90	7.6	4.2 L	0.57L	4.2	0.096	0.57L	0.95L	1.3 L	9	19	1.3 L	130	0.95	2.8 L	13 L	12	1.3 L	3.8	0.19 L	2.3	1.3 L	20	1.9 L	0.19 L	0.19 L	0.23	3.2	2.0L	1.3 L	2.8 L	46	87L	2.8 L	87L	6	0.95L	0.57L	0.8	27	1.9 L	5.7	0.76	14	34
		786C	2	0.040L	4	0.81L	37G	22.4	0.65	0.40L	7	0.089	7	0.9	8.3	0.6	3.2	1.2 L	0.40L	0.16	58	2.9	1.8 L	0.40	1.8 L	0.046	0.24L	0.40L	0.57L	4	4.4	0.57L	49	0.49	1.2 L	5.5L	3.2	0.57L	1.6	0.081L	1.2	0.57L	18L	0.81L	0.081L	0.081L	0.17	1.1	1.8L	0.57	1.2 L	30	37L	1.2 L	37L	3L	0.40L	0.24L	0.4	6.9	0.81L	2.5	0.32	13	6.6
		786D	2	0.065	20	1.1 L	50G	23.9	2.4	0.54L	8	0.080	8	2.3	12	0.7	4.8	1.6 L	0.54L	0.11	66	4.8	4.1	5.6	11 L	0.070	0.32L	0.54L	0.76L	4	4.8	0.76L	65	0.97	1.8	7.3L	7.8	0.76L	2.2	0.11 L	1.5	0.76L	18L	1.1 L	0.11 L	0.11 L	0.35	2.2	1.8L	0.76L	1.6 L	25	50L	7.3 L	50L	3L	0.54L	0.32L	0.4	12	1.1 L	4.6	0.65	10	42
		795	1	0.055L	4	1.1 L	51G	26.0	0.88	0.55L	6	0.13	9	2.2	15	0.8	5.1	1.6 L	0.55L	0.22	54	3.6	2.4 L	0.33L	3.4	0.050	0.33L	0.55L	0.77L	4	6.4	0.77L	63	1.1	1.6 L	7.5L	4.8	0.77L	2.2	0.11 L	1.4	0.77L	8	1.1 L	0.11 L	0.11 L	0.16	1.5	1.1	0.77L	1.6 L	33	51L	1.6 L	51L	3L	0.55L	0.33L	0.5	9.5	1.1 L	3.2	0.44	13	11
Richland		794	1	0.076L	2	1.5 L	70G	44.1	1.1	0.76L	8	0.076L	13	2.4	13	1.5	6.1	2.3 L	0.76L	0.46	130	2.3	7.4	0.46	3.3	0.11	2.3 L	0.76L	1.1 L	7	9.4	1.1 L	58	0.76	2.4	10 L	4.4	1.1 L	17	0.15 L	1.7	1.1 L	48L	1.5 L	0.15 L	0.15 L	0.23	2.9	1.8	1.1	2.3 L	130	70L	2.3 L	70L	12	0.76L	0.46L	3.4	17	1.5 L	7.1	0.46	6.4	43
		799A	2	0.058	7	0.73L	34G	12.3	0.80	0.36L	11	0.064	9	2.5	9	0.3	4.0	1.1 L	0.36L	0.073L	42	2.0	1.6 L	0.95	1.6 L	0.090	0.22L	0.36L	0.51L	4	3.1	0.51L	8.8	1.9	1.1 L	5.0L	3.2	0.51L	0.80	0.073L	1.0	0.51L	28L	0.73L	0.073L	0.073L	0.16	0.95	1.0L	0.51L	1.1 L	19	34L	5.0 L	34L	3L	0.36L	0.22L	0.1L	5.8	0.73L	2.6	0.15	8.8	24
		799B	2	0.083	5	1.4 L	57	33.1	1.1	0.70L	11	0.11	13	3.7	15	1.2	8.8	2.1 L	0.70L	0.28	86	4.0	3.0 L	0.42	3.0	0.10	0.42L	0.70L	0.97L	6	14	0.97L	15	1.5	2.1 L	9.4L	7.8	0.97L	2.4	0.14 L	1.8	0.97L	35L	1.4 L	0.14 L	0.14 L	0.27	2.4	1.2	0.97L	2.1 L	29	64L	9.4 L	64L	3L	0.70L	0.42L	0.8	15	1.4 L	4.6	0.42	17	40
		799C	2	0.061	7	0.87L	40G	14.9	1.2	0.44L	10	0.078	10	1.5	8	0.4	3.9	1.3 L	0.44L	0.17	46	2.7	1.9 L	0.96	8.7	0.16	0.26L	0.44L	0.61L	3	3.2	0.61L	10	1.4	1.3 L	5.9L	3.8	0.61L	0.87L	0.087L	1.2	0.61L	30L	0.87L	0.087L	0.087L	0.14	1.1	1.1L	0.61L	1.3 L	20	40L	5.9 L	40L	3L	0.44L	0.26L	0.3	4.3	0.87L	2.7	0.26	9.6	7.3
		799D	2	0.084L	16	1.7 L	54	30.6	1.8	0.84L	10	0.20	21	3.8	15	1.3	7.1	2.5 L	0.84L	0.17 L	86	4.6	3.7 L	5.4	3.7 L	0.16	0.51L	0.84L	1.2 L	13	9.6	1.2 L	15	2.4	2.5 L	11 L	6.2	1.2 L	2.5	0.17 L	1.7	1.2 L	38	1.7 L	0.17 L	0.17 L	0.42	1.2	1.2	1.2 L	2.5 L	27	78L	11 L	78L	3L	0.84L	0.51L	0.9	7.1	1.7 L	2.7	0.51	17	7.4
		800	1	0.062	14	1.0 L	47G	16.2	0.62	0.52L	10	0.082	10	3.2	9	1.5	3.8	1.5	1.0	0.10 L	74	3.2	1.5 L	0.52	10	0.18	0.31L	0.52L	0.72L	4	7.1	0.72L	13	3.4	1.5	7.0L	4.7	0.72L	1.1	0.10 L	1.5	0.72L	30L	1.0 L	0.10 L	0.10 L	0.19	1.1	1.1L	0.72L	1.5 L	18	47L	7.0 L	47L	3L	0.52L	0.31L	0.2L	6.3	1.0 L	2.7	0.31	8.5	6.3
	Waynesburg (No. 11)	778A	2	0.083L	13	1.7 L	61	64.9	1.8	0.83L	7	0.083L	20	5.4	25	1.9	10	2.5 L	0.83L	0.33	89	6.6	3.6 L	0.83	3.6 L	0.075	2.5 L	0.83L	1.2 L	10	33	1.2 L	22	1.7	2.5 L	11 L	15	1.2 L	9.6	0.17 L	1.7	1.2 L	32	1.7 L	0.17 L	0.17 L	0.36	3.3	2.5	1.2 L	2.5 L	33	76L	2.5 L	76L	7	0.83L	0.50L	1.0	28	1.7 L	6.1	1.0	22	18
		778B	2	0.070L	20	1.4 L	62	57.7	0.97	0.70L	7	0.11	20	4.7	19	1.6	6.7	2.1 L	0.70L	0.28	60	6.2	3.0 L	0.70	3.0	0.23	2.1 L	0.70L	0.97L	10	32	0.97L	15	2.1	2.1 L	9.4L	11	0.97L	8.6	0.14 L	1.9	0.97L	28	1.4 L	0.14 L	0.14 L	0.22	3.5	3.0	1.2	2.1 L	38	64L	2.1 L	64L	5	0.70L	0.42L	0.7	25	1.4 L	7.0	0.83	15	29
		778C	2	0.077L	8	1.5 L	69	145	1.4	0.77L	7	0.077L	22	5.1	22	1.8	8.5	2.3 L	1.8	0.31	140	6.0	3.4 L	0.92	3.4	0.10	2.3 L	0.77L	1.1 L	13	38	1.1 L	23	0.77	3.8	10 L	8.6	1.1 L	8.0	0.15 L	1.8	2.3 L	33	1.5 L	0.15 L	0.15 L	0.30	2.3	2.8	1.4	2.3 L	200	71L	2.3 L	71L	8	2.3 L	0.46L	0.7	25	1.5 L	7.8	0.62	6.5	62
		778D	2	0.14 L	31	2.9 L	63	147	4.0	1.4 L	4	0.14	29	4.1	38	3.3	10	4.3 L	1.4 L	0.57	140	12	6.3 L	10	6.3	0.40	0.86L	1.4 L	2.0 L	16	83	2.0 L	37	0.57L	5.9	17 L	11	2.0 L	19	0.29 L	2.9 L	2.0 L	36	2.9 L	0.29 L	0.29 L	0.42	8.0	4.5	2.3	4.3 L	89	130L	4.3 L	130L	15	1.4 L	0.86L	1.6	51	2.9 L	18	1.7	9.2	110
		778E	*	0.077L	10	1.5 L	71	99.5	1.4	0.77L	8	0.077L	20	5.2	34	1.8	14	2.3 L	0.77L	0.31	95	6.3	3.4 L	0.46L	3.4 L	0.15	2.3 L	0.77L	1.1 L	10	49	1.1 L	25	1.8	3.2	10 L	11	1.1 L	20	0.31 L	1.7	1.1 L	28	1.5 L	0.15 L	0.15 L	0.62	2.9	2.7	1.1	2.3 L	82	71L	2.3 L	71L	3L	0.77L	0.46L	0.9	25	1.5 L	7.7	0.77	10	45
		779A	2	0.11 L	25	2.3 L	68	174	3.2	1.1 L	4	0.11 L	25	5.3	28	2.5	12	3.4 L	1.6	0.23	210	11	5.0 L	12	5.0	0.23	0.68L	1.1 L	1.6 L	14	66	1.6 L	52	1.1	3.4 L	16 L	12	1.6 L	17	0.23 L	2.3 L	1.6 L	42	2.3 L	0.23 L	0.23 L	0.66	4.6	2.1	1.6 L	3.4 L	150	100L	3.4 L	100L	10	1.1 L	0.68L	1.1	36	2.3 L	9.6	1.4	14	39
		779B	2	0.081L	14	1.6 L	68	132	1.6	0.81L	5	0.081L	21	4.7	21	1.7	8.3	2.4 L	1.6	0.32	170	7.1	3.6 L	3.7	3.6 L	0.19	2.9	11 L	11	12	42	1.1 L	29	1.9	2.9	11 L	11	1.1 L	14	0.16 L	2.1	1.1 L	32	1.6 L	0.16 L	0.16 L	0.47	4.2	2.2	1.4	2.4 L	180	74L	2.4 L	74L	3L	0.81L	0.49L	0.8	31	1.6 L	10	0.97	11	50
		779C	2	0.079L	22	1.6 L	65	75.8	2.8	0.79L	7	0.079L	16	3.9	36	1.4	9.2	2.4 L	0.79L	0.32	100	5.7	3.5 L	6.5	3.5 L	0.14	0.47L	0.79L	1.1 L	8	24	1.1 L	65	4.4	3.2	11 L	12	1.1 L	19	0.16 L	2.0	1.1 L	26	1.6 L	0.16 L	0.16 L	0.74	3.2	1.2	1.6	2.4 L	52	73L	2.4 L	73L	6	0.79L	0.47L	1.0	28	1.6 L	12	0.63	17	54
		779D	†	0.092L	26	1.8 L	68	122	2.8	0.92L	5	0.092L	21	4.7	22	1.7	13	2.8 L	1.8	0.18	150	7.9	4.0 L	12	4.0	0.18	0.55L	0.92L	1.3 L	12	35	1.3 L	40	4.2	3.5	12 L	12	1.3 L	24	0.18 L	2.0	1.3 L	52L	1.8 L	0.18 L	0.18 L	1.1	4.0	2.0	1.6	2.8 L	110	85L	2.8 L	85L	3L	0.92L	0.55L	1.9	37	1.8 L	14	0.92	16	64
		793A	2	0.10 L	11	2.0 L	72	203	3.8	1.2	5	0.10 L	33	5.4	25	2.1	12	3.0 L	3.6	0.60	230	10	4.4 L	5.8	4.4 L	0.36	0.60L	1.0 L	1.4 L	17	64	1.4 L	30	0.40L	4.0 L	14 L	14	1.4 L	24	0.20 L	3.4	1.4 L	32	2.0 L	0.20 L	0.20 L	0.72	5.6	5.1	2.0	3.0 L	440	92L	3.0 L	92L	9	1.0 L	0.60L	1.1	40	2.0 L	12	1.4	4.8	58
		793B	2	0.082L	12	1.6 L	69	79.9	1.3	0.82L	6	0.082L	21	4.2	21	1.7	8.6	2.5 L	2.1	0.33	95	6.1	3.6 L	0.50L	3.6 L	0.14	2.5 L	0.82L	1.2 L	11	35	1.2 L	16	0.99	3.3	11 L	11	1.2 L	18	0.16 L	2.0	1.2 L	35	1.6 L	0.16 L	0.16 L	0.49	3.8	2.8	1.3	2.5 L	68	76L	2.5 L	76L	3L	0.82L	0.50L	0.9	26	1.6 L	8.6	0.66	7.9	56
		793C	2	0.091L	14	1.8 L	75	81.4	2.7	0.91L	7	0.091L	21	3.7	23	1.9	8.4	2.7 L	0.91L	0.73	120	7.3	4.0 L	1.3	4.0 L	0.11	2.7 L	0.91L	1.3 L	11	36	1.3 L	27	2.0	4.0	12 L	15	1.3 L	15	0.18 L	2.4	1.3 L	39	1.8 L	0.18 L	0.18 L	0.51	3.4	1.9	1.4	2.7 L	40	84L	2.7 L	84L	6	0.91L	0.55L	0.9	31	1.8 L	12	0.91	16	75
Smith	Pittsburgh (No. 8)	730	1	0.046	4	0.43	43G	24.8	0.84	0.47L	B	0.46 E	5.8LE	2.3E	9.7E	H	16	0.65L	0.47L	0.093L	71	3.2	1.4 L	1.1	2.0 L	0.15	0.28L	0.46L	0.65L	0.46LE	8.4	0.28L	18	0.65	1.5	6.3L	8.3	0.65L	11	0.093L	0.93	0.65L	H	0.93L	0.093L	0.093L	0.2	2.2	1.4	0.74	1.4 L	60	43L	0.93L	43L	3L	0.46L	0.28L	0.7	14	0.93L	3.9	0.37	9.3	31
		730A	1	0.11	4	1.4	65	27.0	0.82	0.68L	B	0.72 E	5.8LE	2.7E	12 E	H	190	0.95L	0.68L	0.14 L	53	4.1	2.0 L	1.6	3.0 L	0.29	0.41L	0.68L	0.95L	0.68LE	12	0.41L	44	2.8	2.2	9.2L	12	0.95L	23	0.14 L	1.6	0.95L	H	1.4 L	0.14 L	0.14 L	0.8	2.4	1.8	0.68L	20	61	62L	1.4 L	62L	3L	0.68L	0.41L	0.8	15	1.4 L	3.8	0.41	22	57
Union	Meigs Creek (No. 9)	798	1	0.077	2	0.96L	44G	38.0	0.86	0.48L	8	0.053	11	2.3	13	1.1	6.3	1.4 L	0.48L	0.29	76	4.0	2.1 L	0.67	9.6 L	0.040	0.29L	0.48L	0.67L	6	14	0.67L	15	0.77	1.4	6.5L	9.2	0.67L	4.2	0.096L	1.3	0.67L	10	0.96L	0.096L	0.096L	0.16	2.5	2.9	0.77	1.4 L	31	44L	1.4 L	44L	3L	0.48L	0.29L	0.6	17	0.96L	6.1	0.58	8.6	28
Washington	Pittsburgh (No. 8)	722	1	N	5	N	51	31	0.72	N	B	0.10 LE	N	1.5E	7.2E	B	4.6	B	B	N	60	5.2	B	3.1	N	0.11	B	N	B	10 LE	9.3	B	21	0.72	2.1	N	5.2	B	3.1	N	N	N	B	N	B	N	B	0.2	1.5	2.3X	N	N	52	N	N	N	3L	N	B	1.0	19	N	3.1	B	9.4	15
		723	1	N	5	N	38	38	0.90	N	B	0.13 LE	64 LE	1.9E	9.0E	B	7.2	B	B	N	85	3.8	N	N	N	0.14	B	N	B	13 LE	12	B	19	0.90	2.6	N	6.4	B	4.5	N	N	N	B	N	B	N	B	0.3	2.6	3.5X	N	N	38	N	N	N	3L	N	B	1.0	19	N	6.4	B	14	19
		728	1	N	5	N	69	20	0.69	N	B	0.099	LE 50 LE	1.5E	6.9E	B	4.6	B	B	N	60	3.0	B	N	N	0.16	B	N	B	9.9 LE	7.5	B	20	N	2.0	N	5.0	B	3.5	N	N	N	B	N	B	N	B	0.2	1.5	2.0X	N	N	30	N	N	N	3L	N	B	0.8	17	N	3.0	B	7.9	N
		729	1	N	5	N	57	23	0.80	N	B	0.11 LE	57 LE	1.7E	8.0E	B	5.2	B	B	N	65	3.4	B	N	N	0.16	B	N	B	11 LE	8.7	B	17	N	2.3	N	5.7	B	4.0	N	N	N	B	N	B	N	B	0.3	1.7	2.8X	N	N	34	N	N	N	3L	N	B	0.8	17	N	3.4	B	9.1	N
Wheeling		814	1	0.072	6	1.4 L	66G	41.2	1.3	0.72L	12	0.10	14	3.0	20	1.2	8.6	2.2 L	1.2	0.29	93	6.2	3.2 L	3.4	3.2 L	0.090	0.43L	0.72L	1.0 L	7	14	1.0 L	26	1.0	2.2 L	9.8L	9.2	1.0 L	2.9	0.20 L	2.8	1.4 L	60	2.2 L	0.20 L	0.20 L	0.27	2.8	1.4 L	0.93L	1.9 L	30	66L	2.2 L	66L	3L	0.72L	0.43L	0.6	16	1.4 L	5.3	0.86	13	10
		815	1	0.049	6	0.98L	45G	18.1	0.88	0.49L	13	0.098	14	2.4	13	0.7	6.5	1.5 L	0.49L	0.098L	67	3.2	2.2 L	1.5	2.2 L	0.24	0.29L	0.49L	0.69L	5	9.4	0.69L	15	1.5	1.5 L	6.7L	4.8	0.69L	3.1	0.098L	0.98L	0.69L	22	0.98L	0.098L	0.098L	0.23	1.2	1.8	0.69L	1.5 L	24	45L	1.5 L	45L	3L	0.49L	0.29L	0.5	8.1	0.98L	2.0	0.29	12	5.8
York		724	1	N	4	N	56	34	0.79	N	B	0.11 LE	56 LE	2.3E	7.9E	B	5.9	B	B	N	65	3.4	B	N	N	0.11	B	N	B	11 LE	11	B	17	N	2.3	N	5.6	B	5.1	N	N	N	B	N	B	N	B	0.2	1.7	6.9X	N	N	56	N	N	N	3L	N	B	0.2L	17	N	3.4	B	9.0	N
		725	1	N	3	N	71	20	0.71	N	B	0.10 LE	51 LE	2.0E	7.1E	B	5.7	B	B	N	70	3.0	B	N	N	0.09	B	N	B	10 LE	9.3	B	15	1.5	2.0	N	5.1	B	4.0	N	N	N	B	N	B	N	B	0.2	1.5	2.9X	N	N	51	N	N	N	3L	N	B	0.8	10	N	3.0	B	9.1	15
COSHOCTON COUNTY																																																																				
Franklin	Middle Kittanning (No. 6)	742A	2	0.022	1	0.37L	17G	79.6G	0.96	0.18L	16	0.078	5	1.0	4.4	0.2	1.8	0.56L	0.52	0.074	24	1.4	1.9	1.0	0.81L	0.12	0.11L	0.18L	0.26L	3	8.1	0.26L	21	1.4	0.78	2.5L	1.7	0.26L	5.9	0.037L	0.70	0.26L	46L	0.37L	0.037L	0.037L	0.14	0.81	2.9	0.26L	0.56L	12	17L	2.5 L	17L	3L	0.18L	0.11L	0.6	4.8	0.37L	2.9	0.15	16	12
		742B	2	0.16	3	2.3 L	100G	131	4.0	1.1 L	10	0.11 L	18	3.5	20	2.1	15	3.4 L	1.1 L	0.45	61

TABLE 8.—*Trace element composition, whole-coal basis, by bed*
(significant figures consistent only with data supplied by the U.S. Geological Survey; J. H. Medlin, oral communication, 1977)

Key to symbols:
Type:
1 - bed sample
2 - benched sample
3 - stockpile sample
* - composite of 778A-C
† - composite of 779 B and C

Method (column heads):
DNA - by delayed neutron activation
E - by emission spectrography
NA - by neutron activation
W - by wet chemistry

B - no data available
E - calculated from emission spectrographic data on ash
G - greater than value shown
H - not determined due to interference
L - less than value shown
N - not detected
W - by wet chemistry
X - by X-ray fluorescence on whole coal

All values in parts per million

County	Township	OGS file no.	Type	Ag E	As NA	Au E	B E	Ba E	Be E	Bi E	Br NA	Cd W	Ce NA	Co NA	Cr NA	Cs NA	Cu W	Dy E	Er E	Eu E	F W	Ga E	Gd E	Ge E	Hf E	Hg W	Ho E	In E	Ir E	La NA	Li W	Lu E	Mn E	Mo E	Nb E	Nd E	Ni E	Os E	Pb W	Pd E	Pr E	Pt E	Rb NA	Re E	Rh E	Ru E	Sb NA	Sc E	Se NA	Sm E	Sn E	Sr E	Ta E	Tb E	Te E	Th DNA	Tl E	Tm E	U DNA	V E	W E	Y E	Yb E	Zn W	Zr E
BROOKVILLE (NO. 4) COAL																																																																						
Noble	Elk	773	1	0.15	28	N	44	220	2.9	N	18	0.29	8	4.3	8	0.2	18	N	N	N	54	15	N	22	N	0.44	N	N	B	3	6.6	N	20 W	2.2	4.4	B	44	B	23	N	B	N	3	N	B	B	0.78	4.4	1.3	B	N	44	N	N	N	3L	N	N	1.7	22	N	22	2.2	130	29
CLARION (NO. 4A) COAL																																																																					
Meigs	Columbia	804A	2	0.061L	3	1.2 L	56G	41.2	1.2	0.61L	16	0.23	14	2.7	13	1.7	8.4	1.8 L	1.8	0.37	130	3.5	2.7 L	0.37L	2.7 L	0.090	0.37L	0.61L	0.85L	7	5.5	0.85L	16	2.8	1.8 L	8.3L	7.0	0.85L	2.6	0.12 L	1.6	0.85L	44	1.2 L	0.12 L	0.12 L	0.19	2.6	7.5	0.85	1.8 L	45	56L	1.8 L	56L	3.0	0.61L	0.37L	0.5	16	1.2 L	8.0	0.61	35	32
		804B	2	0.41 L	3	8.1 L	140	283	2.4	4.1 L	3	0.081L	78	8.9	73	12	19	12 L	4.1 L	1.6	150	25	18 L	2.4 L	18 L	0.16	12 L	4.1 L	5.7 L	42	31	5.7 L	80	1.6 L	12 L	55 L	26	5.7 L	19	0.81 L	8.1 L	5.7 L	170	8.1 L	0.81 L	0.81 L	0.60	15	15	5.7 L	12 L	110	370L	12 L	370L	13	4.1 L	2.4 L	3.1	81	8.1 L	19	2.4	45	140
		804C	2	0.056L	3	1.1 L	52G	31.0	1.5	0.56L	19	0.038	19	2.7	14	0.8	2.7	1.7 L	1.0	0.45	110	3.4	1.7 L	0.45	2.5 L	0.12	0.34L	0.56L	0.79L	9	9.9	0.79L	15	1.1	1.7 L	7.7L	5.6	0.79L	3.8	0.11 L	1.8	0.79L	33L	1.1 L	0.11 L	0.11 L	0.15	1.8	5.1	1.0	1.7 L	45	52L	1.7 L	52L	3L	0.56L	0.34L	0.5	16	1.1 L	9.0	0.56	8.0	30
		804D	2	0.12 L	3	2.3 L	110G	63.2	2.3	1.2 L	14	0.094	47	7.2	47	2.0	23	3.5 L	1.4	0.94	130	7.7	5.1 L	0.70L	5.1 L	0.20	3.5 L	1.2 L	1.6 L	28	35	1.6 L	23	1.6	3.5 L	16 L	16	1.6 L	7.0	0.23 L	4.2	1.6 L	45L	2.3 L	0.23 L	0.23 L	0.36	8.0	9.7	2.6	3.5 L	100	110L	3.5 L	110L	7	1.2 L	0.70L	1.8	37	2.3 L	16	1.6	17	70
		805	1	0.087L	3	1.7 L	80G	62.8	1.0	0.87L	17	0.10	20	3.3	18	1.8	9.9	2.6 L	0.87L	0.52	140	5.6	2.6 L	0.52L	3.8 L	0.12	2.6 L	0.87L	1.2 L	9	12	1.2 L	31	1.6	2.6 L	12 L	8.2	1.2 L	4.4	0.17 L	1.7 L	1.2 L	28	1.7 L	0.17 L	0.17 L	0.26	3.0	6.9	1.2 L	2.6 L	50	80L	2.6 L	80L	4	0.87L	0.52L	0.8	19	1.7 L	6.1	1.0	23	15
	Salem	806A	2	0.10 L	5	2.0 L	93G	256	3.2	1.0 L	17	0.15	14	2.3	22	1.8	9.7	3.0 L	1.0 L	0.20	130	4.7	4.5 L	0.61L	4.5 L	0.20	0.61L	1.0 L	1.4 L	8	12	1.4 L	32	1.8	3.0 L	14 L	4.5	1.4 L	2.0 L	0.20 L	2.8	1.4 L	26	2.0 L	0.20 L	0.20 L	0.27	2.8	7.6	1.4 L	3.0 L	53	93L	3.0 L	93L	3L	1.0 L	0.61L	0.6	14	2.0 L	6.3	0.61	20	43
		806B	2	0.39 L	2	7.8 L	130	633	2.3	3.9 L	2	0.078L	96	7.8	90	13	27	12 L	3.9 L	1.6	70	26	17 L	2.3 L	17 L	0.20	12 L	3.9 L	5.5 L	49	74	5.5 L	75	1.6 L	12 L	53 L	28	5.5 L	23	0.78 L	7.8 L	0.78 L	0.78 L	0.81	18	14	5.5 L	12 L	100	360L	12 L	360L	22	3.9 L	2.3 L	3.5	94	7.8 L	22	3.9	41	140
		806C	2	0.12	2	1.3 L	60G	33.9	0.91	0.65L	21	0.044	14	2.9	15	0.7	8.8	2.0 L	2.2	0.52	130	6.0	2.9 L	0.39L	2.9 L	0.17	0.39L	0.65L	0.91L	6	17	0.91L	20	0.65	2.0 L	8.8L	3.5	0.91L	1.4	0.13 L	1.8	0.91L	36L	1.3 L	0.13 L	0.13 L	0.25	1.7	6.0	0.91L	2.0 L	32	60L	8.8 L	60L	3L	0.65L	0.39L	0.5	9.2	1.3 L	4.8	0.78	8.6	6.4
		806D	2	0.14	6	2.8 L	130	96.4	1.4	1.4 L	19	0.10	26	4.5	36	2.1	22	4.2 L	3.9	0.83	150	15	4.2 L	5.3	6.1 L	0.48	0.83L	1.4 L	1.9 L	11	28	1.9 L	39	1.9	4.2 L	19 L	6.1	1.9	3.3	0.28 L	3.3	1.9 L	47L	2.8 L	0.28 L	0.28 L	0.38	4.7	1.8L	1.9 L	4.2 L	47	130L	19 L	130L	5	1.4 L	0.83L	1.0	36	2.8 L	15	1.7	22	25
Vinton	Wilkesville	807A	2	0.013L	2	1.3 L	130G	51	2.2	2.9 L	14	0.43	13	3.1	16	1.8	9.0	4.2 L	1.3 L	0.39	92	6.8	2.5	1.6	13 L	0.085	0.91L	0.91L	2.0 L	7	10	2.9 L	51	5.2	4.7	12	6.9	1.3 L	2.3	0.26 L	8.8 L	0.91L	16	1.3 L	0.13 L	0.39 L	0.16	4.0	6.9	6.0 L	0.91L	96	42L	4.2 L	B	3L	1.3 L	0.65L	1.6	23	1.3 L	10	0.78	23	73
		807B	2	0.16 L	3	15 L	160	480	2.5	33 L	2	0.12	89	9.1	87	13	36	48 L	15 L	2.5 L	800	26	9.9 L	6.6 L	150	0.14	9.9 L	9.9 L	22 L	52	47	33 L	71	3.3 L	12	75	39	15 L	19	2.5 L	99 L	9.9 L	150	480L	48 L	B	17	15 L	6.6 L	3.7	120	15 L	24	4.1	43	180
		807C	2	0.046	3	1.2 L	120G	27	1.3	2.6 L	13	0.053	13	2.9	15	0.8	8.7	3.7 L	1.4	0.23	68	7.1	2.9	0.81	12	0.080	0.81L	0.81L	37 L	6	11	2.6 L	36	1.4	2.9	9.7	6.4	1.2 L	2.7	0.23 L	7.9 L	0.81L	12	1.2 L	0.12 L	0.35 L	0.18	3.9	4.5	5.3 L	0.81L	64	37L	3.7 L	B	3L	1.2 L	0.58L	0.7	23	1.2 L	10	0.70	9.3	44
		807D	2	0.074	3	1.8 L	180G	70	1.5	4.1 L	13	0.096	22	4.4	25	1.8	15	5.9 L	1.8 L	0.37	200	9.4	3.0	1.1	18	0.095	1.3 L	1.3 L	2.8 L	12	18	4.1 L	50	0.92	6.3	15	9.4	1.8 L	3.9	0.37 L	12	1.3 L	17	1.8 L	0.18 L	0.56 L	0.16	5.9	5.0	8.5 L	1.3 L	150	59L	5.9 L	B	3	1.8 L	0.92L	1.0	33	1.8 L	12	0.92	14	92
		808	1	0.024L	3	2.4 L	150	78	1.4	5.2 L	11	0.14	29	4.8	30	2.6	16	7.5 L	2.4 L	0.70	120	12	3.8	1.2 L	24	0.14	1.6 L	1.6 L	3.5 L	16	19	5.2 L	75	1.9	4.7	22	15	2.4 L	6.1	0.47 L	16	1.6 L	41	2.4 L	0.24 L	0.70 L	0.24	7.5	9.2	11	1.6 L	89	75L	7.5 L	B	6	2.4 L	1.2 L	1.3	45	2.4 L	13	1.2	16	63
LOWER KITTANNING (NO. 5) COAL																																																																			
Coshocton	Virginia	745A	2	0.011L	2	1.2 L	120G	38	2.5	2.6 L	5	0.071	8	1.2	7.2	0.3	4.4	3.8 L	1.2 L	0.21 L	50	2.0	1.2	3.6	12 L	0.17	0.84L	0.84L	1.8 L	3	2.7	2.6 L	60 W	5.9	1.2	6.1	3.4	1.2 L	1.1 L	0.21 L	8.2 L	0.84L	6	1.2 L	0.11 L	0.42 L	0.15	2.0	1.7	5.5 L	0.84L	30	38L	3.8 L	B	3L	1.2 L	0.53L	3.1	8.7	1.2 L	5.9	0.53	22	12
		745B	2	0.033	B	0.90L	90G	18	1.6	2.1 L	B	0.057	B	B	B	B	6.9	3.0 L	0.90L	0.16 L	150	2.4	0.66L	0.41L	9.0 L	0.18	0.66L	0.66L	30 L	B	5.4	2.1 L	15 W	2.6	1.5	5.4	2.2	0.90L	3.4	0.16 L	8.1	0.66L	B	0.90L	0.082L	0.33 L	B	1.8	B	4.3 L	0.66L	14	30L	3.0 L	B	3L	0.90L	0.41L	0.4	8.0	0.90L	5.3	0.25	13	16
		745C	2	0.053	3	1.2 L	120G	12	2.8	2.7 L	9	0.093	12	3.1	12	0.5	8.4	3.8 L	1.2 L	0.21	35	3.4	1.8	0.74	12 L	0.27	0.85L	0.85L	38 L	6	9.4	2.7 L	13 W	1.8	2.5	5.5L	4.7	1.2 L	3.3	0.21 L	8.3 L	0.85L	10	1.2 L	0.11 L	0.42 L	0.25	2.7	2.2	5.5 L	0.85	22	38L	3.8 L	B	3L	1.2 L	0.53L	0.6	12	1.2 L	14	0.64	20	28
		745D	2	0.042	8	0.91L	91G	18	2.4	2.1 L	9	0.22	7	4.3	15	0.5	12	3.9	2.5	0.33	21	4.2	3.3	22	9.1 L	0.13	0.66L	0.66L	30 L	3	3.2	2.1 L	14 W	3.3	2.2	6.6	13	0.91L	3.5	0.17 L	6.5 L	0.66L	11	0.91L	0.083L	0.33 L	0.25	2.4	1.0	4.3 L	1.2	28	30L	3.0 L	B	3L	0.91L	0.42L	1.5	12	0.91L	15	1.4	110	42
Noble	Elk	772	1	N	12	N	20	20	1.3	N	21	0.058	8	2.9	10	0.4	7.8	N	N	N	44	4.6	N	4.6	N	0.22	N	N	B	4	5.1	N	8.4W	4.6	2.0	N	9.8	B	3.6	N	N	N	10	N	B	B	0.84	2.0	3.2	N	N	20	N	N	N	3L	N	N	1.8	20	N	6.5	0.65	10	9.8
MIDDLE KITTANNING (NO. 6) COAL																																																																	
Coshocton	Franklin	742A	2	0.022	1	0.37L	17G	79.6 G	0.96	0.18L	16	0.078	5	1.0	4.4	0.2	1.8	0.56L	0.52	0.074	24	1.4	1.9	1.0	0.81L	0.12	0.11L	0.18L	0.26L	3	8.1	0.26L	21	1.4	0.78	2.5L	1.7	0.26L	5.9	0.037L	0.70	0.26L	46L	0.37L	0.037L	0.037L	0.14	0.81	2.9	0.26L	0.56L	12	17L	2.5 L	17L	3L	0.18L	0.11L	0.6	4.8	0.37L	2.9	0.15	16	12
		742B	2	0.16	3	2.3 L	100G	131	4.0	1.1 L	10	0.11 L	18	3.5	20	2.1	15	3.4 L	1.1 L	0.45	61	9.4	5.0 L	5.2	5.0 L	0.34	0.68L	1.1 L	1.6 L	11	65	1.6 L	32	5.4	4.0	15 L	9.2	1.6 L	27	0.22 L	2.7	1.6 L	65L	2.2 L	0.22 L	0.22 L	0.38	4.3	3.4	1.6 L	3.4 L	40	100L	3.4 L	100L	10	1.1 L	0.68L	2.3	32	2.2	10	0.90	15	63
		775A	2	0.12	3	1.5 L	69G	196	3.0	0.75L	17	0.14	13	2.4	12	1.2	14	2.2 L	2.4	0.30	56	8.4	3.3 L	16	15 L	0.51	0.45L	0.75L	1.0 L	1 L	28	1.0 L	18	10	2.7	10 L	6.8	1.0 L	2.4	0.15 L	2.0	1.0 L	17	1.5 L	0.15 L	0.15 L	0.31	4.0	3.2	2.4	1.0 L	2.2 L	26	69L	10 L	69L	9	0.75L	0.45L	3.3	34	1.5 L	12	1.0	44	66
		775B	2	0.048	2	0.68L	31G	114	1.6	0.34L	24	0.34 L	7	1.0	6	0.3	3.3	1.0 L	0.68	0.068	36	2.8	1.5 L	2.4	6.8 L	0.19	0.20L	0.34L	0.48L	4	10	0.48L	36	1.7	1.2	4.6L	1.8	0.48L	10	0.068L	1.2	0.48L	10L	0.68L	0.068L	0.068L	0.59	1.0	3.2	0.48L	1.0 L	20	31L	4.6 L	31L	3L	0.34L	0.20L	0.1L	4.3	0.68L	3.1	0.34	6.5	5.6
	Linton	781A	2	0.036	3	0.72L	33G	13.8	1.0	0.36L	19	0.036L	8	1.5	7.1	0.4	3.6	1.1 L	0.36L	0.14	34	2.9	1.7	0.50	1.6 L	0.19	0.22L	0.36L	0.50L	4	28	0.50L	44	3.1	1.3	4.9L	3.5	0.50L	7.2	0.072L	1.3	0.50L	91L	0.72L	0.072L	0.072L	0.19	1.5	3.7	0.65	1.1 L	26	33L	4.9 L	33L	3L	0.36L	0.22L	0.3	7.9	0.72L	6.0	0.36	5.8	32
		781B	2	0.036	2	0.36L	17G	7.31	0.68	0.18L	18	0.018L	4	0.7	6.2	0.3	4.1	1.0 L	0.20	0.050	42	2.1	2.0	1.3	0.61	0.79L	0.060L	0.25L	2	7.6	0.25L	6.8	1.4	0.83	2.4L	2.6	0.25L	5	0.036L	0.61	0.54L	73L	0.36L	0.036L	0.036L	0.16	0.90	1.3	0.32	0.54L	18	17L	0.54L	17L	3L	0.16L	0.11L	0.5	5.8	0.36L	6.1	0.22	5.4	15
		781C	2	0.13	26	1.9 L	87G	47.2	2.1	0.94L	12	0.094L	32	3.8	17	1.4	18	2.8 L	4.2	0.94	73	7.2	4.9	1.1	4.2 L	0.27	0.57L	0.94L	1.3 L	17	43	1.3 L	21	4.7	4.7	24	15	1.3 L	24	0.19 L	3.8	1.3 L	64L	1.9 L	0.19 L	0.19 L	0.56	4.0	2.3	2.4	2.8 L	96	87L	2.8 L	87L	8	0.94L	0.57L	1.3	26	1.9 L	25	1.3	36	76
		782A	2	0.043	21	0.63L	28G	12.2	2.9	0.30L	18	0.030L	6	1.2	2.1L	0.2	3.3	0.92L	0.30L	0.061L	38	2.6	1.8	0.79	1.3 L	0.28	0.18L	0.30L	0.43L	3	18	0.43L	32	2.4	1.3	4.1L	3.5	0.43L	7.9	0.12 L	2.8	0.43L	9L	0.92L	0.28L	0.061L	0.27	1.2	1.1L	0.43L	0.92L	28	38L	3.0 L	B	3L	0.30L	0.18L	0.4	5.3	0.61	6.1	0.30	3.8	30
		782B	2	0.066	3	0.73L	34G	11.5	1.2	0.36L	19	0.036L	6	0.9	2.5L	0.5	7.3	1.1 L	1.3	0.22	28	4.5	1.6 L	0.73	1.6 L	0.13	0.36L	0.51L	3	15	0.51L	15	1.7	1.2	4.6L	1.8	0.48L	10	0.15 L	1.1	0.51L	1.1 L	25	34L	5.0 L	34L	3L	0.32L	0.22L	0.3	12	0.73L	8.8	0.51	7.3	16
		782C	2	0.20	8	2.9 L	120	99.5	3.2	1.4 L	10	0.14 L	42	9.1	37	3.9	35	4.4 L	3.5	0.87	140	22	6.4 L	16	6.4 L	0.16	4.4 L	1.4 L	2.0 L	21	150	2.0 L	41	6.4	9.3	20 L	23	2.0 L	29	0.29 L	3.5	2.0 L	76L	2.9 L	0.29 L	0.29 L	0.89	6.1	2.7	2.6	4.4 L	140	130L	4.4 L	130L	20	1.4 L	0.87L	3.7	61	2.9 L	25	2.0	78	120
	Virginia	739	1	0.049	2	1.1 L	110G	35	2.1	2.4 L	8	0.070	6	2.4	9.1	0.4	8.8	3.5 L	1.1 L	0.19 L	28	3.9	0.78L	4.1	11 L	0.14	0.78L	0.78L	35 L	2	11	2.4 L	14 W	4.1	1.3	5.0L	4.1	1.1 L	4.9	0.19 L	7.6 L	0.78L	13L	1.1 L	0.097L	0.39 L	0.38	2.1	3.6	5.0 L	1.1	22	35L	3.5 L	B	3L	1.1 L	0.49L	0.8	8.1	1.1 L	4.8	0.39	16	8.1
		740A	2	0.011	1	0.63L	63G	22	1.1	1.4 L	12	0.052	8	0.6	3.4	0.1	4.2	2.1 L	0.63L	0.11 L	20L	1.3	0.45L	0.29L	6.3 L	0.26	0.46L	0.46L	1.0 L	4	8.0	1.4 L	15 W	0.86	0.23	5.0L	1.9	0.63L	1.3	0.11 L	4.4	0.46L	10L	0.63L	0.057L	0.23 L	0.14	0.86	3.8	3.0 L	0.46L	20	21L	2.1 L	B	3L	0.63L	0.29L	0.1L	3.4	0.63L	1.3	0.17	11	2.6
		740B	2	0.019	1	0.41L	41G	6.3	1.1	0.41L	11	0.028	4	0.7	6.2	0.3	4.1	1.3 L	0.41L	0.11	42	1.9	0.85	1.3	4.1 L	0.15	0.30L	0.30L	0.63L	1	4.4	0.93L	16 W	0.93	0.37	H	1.3 L	0.41L	0.37	0.074L	2.9	0.37L	11	0.41L	0.057L	0.15 L	0.12	1.4	1.9 L	0.56	21	31L	1.3 L	B	3L	0.41L	0.19L	0.3	4.1	1.1	9.0	0.56	4.1	30
		740C	2	0.070	6	2.6 L	97	32	2.3	5.8 L	5	0.19	13	6.3	21	1.8	23	8.7 L	2.6	0.46 L	26	6.0	2.1 L	4.2	26	0.48	1.9 L	1.9 L	8.4	7	44	5.8 L	20 W	3.0	1.6	12 L	7.9	2.6 L	3.9	0.46 L	18 L	1.9 L	24	2.6 L	0.23 L	0.93 L	0.32	4.4	3.6	12	1.9 L	26	84L	8.4 L	B	4	2.6 L	1.2 L	2.6	19	2.6 L	9.0	0.93	46	21
Muskingum	Adams	743A	2	0.009	1	0.34L	18	14	0.53	0.78L	20	0.14	3	1.0	2.5	0.2L	2.4	1.1 L	0.34L	0.062	20L	1.2	0.25L	0.22	3.4 L	0.21	0.25L	0.25L	0.53L	2	3.1	0.78L	3.1W	0.84	0.16	1.8	1.3	0.34L	0.31L	0.062L	2.4 L	0.25L	9L	0.34L	0.031L	0.12 L	0.11	0.50	3.4	1.6 L	0.28	40	11L	1.1 L	B	B	0.34L	0.16L	B	1.5	0.34L	1.1	0.16	20	1.5
		743B	2	0.060	1	1.7 L	82	7.2	0.76	3.8 L	15	0.060	2	0.8	3.9	0.4L	3.5	5.4 L	1.7 L	0.30 L	20L	3.5	2.1 L	0.91	17	0.25	1.2 L	1.2 L	54	1	2.6	3.8 L	15 W	5.1	1.1	7.9L	1.1	1.7 L	1.5	0.60 L	7.9L	1.1 L	71	1.7 L	0.76L	0.1L	2.3	1.7	1.5	0.45L	1.2 L	3	130L	4.1 L	130L	17	1.4 L	0.82L	1.3	38	2.8 L	9.4	1.1	13	66
		743C	2	0.15 L	1	13 L	110	360	3.0	30 L	1	0.074L	32	5.2	36	7.5	27	43 L	13 L	2.2 L	700	21	8.9 L	5.9 L	130	0.15	8.9 L	8.9 L	20 L	34	320	30 L	100 W	3.0 L	13	61 L	23	13 L	13	2.2 L	89 L	8.9 L	130	13 L	1.5 L	4.4 L	1.4	18	1.7	61 L	8.9 L	120	430L	43 L	B	16	13 L	5.9 L	3.2	96	13 L	12	3.0	30	160
		743D	2	0.022L	6	2.4 L	84	77	3.1	5.5 L	6	0.15	21	3.8	27	1.8	13	7.9 L	2.4 L	0.44 L	160	9.0	1.8 L	14	24	0.13	1.8 L	1.8 L	3.7 L	10	51	5.5 L	140	W 12	1.3	11	11 L	13	2.4 L	6.2	0.44 L	17	1.8 L	28	2.4 L	0.22 L	0.88 L	0.48	5.5	6.5	11 L	1.8 L	40	79L	7.9 L	B	3L	1.7 L	0.76L	0.1L	2.3	1.7 L	1.5	0.45	12	1.7
	Monroe	744	1	0.038	4	1.4 L	140G	41	2.4	3.1 L	18	0.078	12	1.6	15	1.1	10	4.5 L	1.4 L	0.25 L	94	4.9	1.0 L	2.6	14 L	0.24	1.0 L	1.0 L	2.1 L	6	31	3.1 L	15 W	2.9	2.3	8.5	3.8	1.4 L	2.1	0.25 L	9.8 L	1.0 L	16	1.4 L	0.13 L	0.50 L	0.12	3.8	2.6	6.5 L	1.1	21	45L	4.5 L	B	3L	1.4 L	0.63L	0.8L	20	1.4 L	8.0	0.50	23	31
	Washington	801A	2	0.022	3	0.37L	37G	92	3.7	0.81L	18	0.035	11	1.6	6	0.4L	4.1	1.8	0.96	0.15	28	3.6	1.6	4.4	3.7 L	0.14	0.26L	0.26L	0.56L	6	5.6	0.81L	28	4.1	0.92	7.4	3.4	0.37L	0.89	0.074L	2.5 L	0.26L	15L	0.37L	0.037L	0.11 L	0.12	1.7	2.4	1.7 L	0.52	59	12L	1.2 L	B	3L	0.37L	0.18L	0.4	7.4	0.37L	8.9	0.37	11	11
		801B	2	0.10	10	2.0 L	86	48	4.6	4.4 L	9	0.22	32	3.7	26	1.6	28	6.4 L	2.0 L	0.40	76	13	2.6	28	20 L	0.28	1.4 L	1.4 L	3.0 L	17	40	4.4 L	66	2.2	1.0	9.4	12	2.0 L	7.0	0.40 L	14 L	1.4 L	120	64L	6.4 L	B	5	2.0 L	1.0 L	2.1	24	2.0 L	7.8	1.4	40	12
		802A	2	0.052	4	0.65L	65G	12	3.8	1.4 L	13	0.048	6	1.0	3.6	0.4L	3.6	2.1 L	0.65L	0.12 L	22	2.9	0.46L	1.6	6.5 L	0.30	0.46L	0.46L	2.1 L	2	3.6	1.4 L	32	7.8	1.2	3.1	2.7	0.65L	0.63L	0.14 L	4.4	0.46L	14L	0.65L	0.065L	0.20 L	4.3	0.98	3.6	3.0 L	0.46L	7.8	0.52	3.6	0.65L	7.8	0.52	9.1	41	140
		802B	2	0.022	1	0.45L	45G	44	3.0	0.99L	15	0.044	7	1.1	12	0.6	7.6	1.4 L	1.0	0.14	48	5.0	1.0	2.8	4.5 L	0.070	0.32L	0.32L	14 L	4	9.0	0.99L	18	1.5	1.5	5.8	3.0	0.45L	0.94

TABLE 9.–*Trace element composition of the laboratory ash, by county*
(significant figures consistent only with data supplied by the U.S. Geological Survey; J. H. Medlin, oral communication, 1977)

Key to symbols:
Type:
1 - bed sample
2 - benched sample
3 - stockpile sample
* - composite of 778A-C
† - composite of 779 B and C

Method (column heads):
E - by emission spectrography
W - by wet chemistry

B - no data available
G - greater than value shown
H - not determined due to interference
L - less than value shown
N - not detected
W - by wet chemistry

All values in parts per million

Township	Seam	OGS file no.	Type	Ag E	Au E	B E	Ba E	Be E	Bi E	Cd W	Ce E	Co E	Cr E	Cu W	Dy E	Er E	Eu E	Ga E	Gd E	Ge E	Hf E	Ho E	In E	Ir E	La E	Li W	Lu E	Mn E	Mo E	Nb E	Nd E	Ni E	Os E	Pb W	Pd E	Pr E	Pt E	Re E	Rh E	Ru E	Sc E	Sm E	Sn E	Sr E	Ta E	Tb E	Te E	Tl E	Tm E	V E	W E	Y E	Yb E	Zn W	Zr E
BELMONT COUNTY																																																						
Colerain	Waynesburg (No. 11)	788	3	0.5L	10L	350	360	8	5L	0.5 L				36	15L	5L	2	30	22L	3	22L	3L	5L	7L		120	7L	140	24	15L	68L	41	7L	90	1L	10L	7L	10L	1L	1L	19	7L	15L	170	460L	15L	460L	5L	3L	140	10L	37	3	68	290
		789A	2	0.5L	10L	340	432	7	5L	0.5 L				48	15L	10	2	36	22L	4	22L	3L	5L	7L		280	7L	130	5	15L	68L	51	7L	116	2L	14	7L	10L	1L	1L	19	7L	15L	360	460L	15L	460L	5L	3L	170	10L	36	3	28	220
		789B	2	0.5L	10L	460G	450	9	5L	0.5 L				48	15L	8	2	40	22L	4	22L	15L	5L	7L		160	7L	120	4	17	68L	74	7L	68	1L	13	7L	10L	1L	1L	23	7L	15L	270	460L	15L	460L	5L	3L	170	10L	37	6	80	190
Goshen		791A	2	0.5L	10L	320	483	10	5L	0.5 L				40	15L	9	3	47	22L	9	22L	15L	5L	7L		290	7L	110	8	15L	68L	65	7L	36	2L	10L	7L	10L	1L	1L	21	7L	15L	210	460L	15L	460L	5L	3L	180	10L	37	6	62	160
		791B	2	0.5	10L	410	725	10	5L	0.5 L				58	15L	5L	1	45	22L	28	22L	3L	5L	7L		240	7L	130	13	22	68L	65	7L	100	1L	14	7L	10L	1L	1L	25	8	15L	630	460L	68L	460L	5L	3L	200	10L	51	5	50	360
Kirkwood	Pittsburgh (No. 8)	738A	2	0.5L	10L	410	365	9	5L	0.60				38	15L	5L	2	26	22L	51	22L	3L	5L	7L		52	7L	730	7	15L	68L	42	7L	20L	1L	10L	7L	10L	1L	1L	13	7L	15L	300	460L	68L	460L	5L	3L	72	10L	24	3	80	250
		738B	2	0.5L	10L	460G	176	2	5L	0.52				38	15L	5L	1L	18	15L	3L	22L	3L	5L	7L		54	7L	1900	4	15L	68L	17	7L	20L	1L	10L	7L	10L	1L	1L	5	7L	15L	250	460L	68L	500	5L	3L	36	10L	10	1	64	48
		738C	2	0.5L	10L	240	389	6	5L	0.44				34	15L	5L	1L	21	15L	56	22L	15L	5L	7L		32	7L	610	5	15L	68L	21	7L	20L	1L	10L	7L	10L	1L	1L	7	7L	15L	440	460L	15L	460L	5L	3L	33	10L	13	2	90	180
		786A	2	0.5	10L	460G	268	12	5L	1.7				28	15L	5L	1L	38	22L	3	22L	3L	5L	7L		32	7L	1400	12	15L	68L	28	7L	20L	1L	10L	7L	10L	1L	1L	12	7L	15L	330	460L	68L	460L	5L	3L	53	10L	58	4	52	88
		786B	2	0.5	10L	460G	324	8	5L	0.68				64	15L	5L	2	40	22L	3L	22	3L	5L	7L		100	7L	670	5	15L	68L	65	7L	20	1L	12	7L	10L	1L	1L	17	7L	15L	240	460L	15L	460L	5L	3L	140	10L	30	4	72	180
		786C	2	0.5	10L	460G	276	8	5L	1.1				40	15L	5L	2	36	22L	5	22L	3L	5L	7L		54	7L	610	6	15L	68L	39	7L	20	1L	15	7L	10L	1L	1L	14	7	15L	370	460L	15L	460L	5L	3L	85	10L	31	4	160	81
		786D	2	0.6	10L	460G	221	22	5L	0.74				44	15L	5L	1L	44	38	52	100L	3L	5L	7L		44	7L	600	9	17	68L	72	7L	20L	1L	14	7L	10L	1L	1L	20	7L	15L	230	460L	68L	460L	5L	3L	110	10L	43	6	96	390
		795	1	0.5L	10L	460G	236	8	5L	1.2				46	15L	5L	2	33	22L	3L	31	3L	5L	7L		58	7L	570	10	15L	68L	44	7L	20L	1L	13	7L	10L	1L	1L	14	7L	15L	300	460L	15L	460L	5L	3L	86	10L	29	4	120	100
Richland		794	1	0.5L	10L	460G	290	7	5L	0.5 L				40	15L	5L	3	15	49	3	22L	15L	5L	7L		62	7L	380	5	16	68L	29	7L	110	1L	11	7L	10L	1L	1L	19	7	15L	830	460L	15L	460L	5L	3L	110	10L	47	3	42	280
		799A	2	0.8	10L	460G	169	11	5L	0.88				55	15L	5L	1L	27	22L	13	22L	3L	5L	7L		43	7L	120	26	15L	68L	44	7L	11	1L	14	7L	10L	1L	1L	13	7L	15L	260	460L	68L	460L	5L	3L	80	10L	35	2	120	330
		799B	2	0.6	10	410	238	8	5L	0.82				63	15L	5L	2	29	22L	3	22L	3L	5L	7L		98	7L	110	11	15L	68L	56	7L	17	1L	13	7L	10L	1L	1L	17	7L	15L	210	460L	68L	460L	5L	3L	110	10L	33	3	120	290
		799C	2	0.7	10L	460G	171	14	5L	0.90				45	15L	5L	2	31	22L	11	100L	3L	5L	7L		37	7L	120	16	15L	68L	44	7L	10L	1L	14	7L	10L	1L	1L	13	7L	15L	230	460L	68L	460L	5L	3L	49	10L	31	3	110	84
		799D	2	0.5L	10L	320	181	11	5L	1.2				42	15L	5L	1L	27	22L	32	22L	3L	5L	7L		57	7L	90	14	15L	68L	37	7L	15	1L	10	7L	10L	1L	1L	7	7L	15L	160	460L	68L	460L	5L	3L	42	10L	16	3	100	44
		800	1	0.6	10L	460G	157	6	5L	0.80				37	15L	10	1L	31	15L	5	100L	3L	5L	7L		69	7L	130	33	15L	68L	46	7L	11	1L	15	7L	10L	1L	1L	11	7L	15L	180	460L	68L	460L	5L	3L	61	10L	26	3	83	61
	Waynesburg (No. 11)	778A	2	0.5L	10L	370	391	11	5L	0.5				60	15L	5L	2	40	22L	5	22L	15L	5L	7L		200	7L	130	10	15L	68L	92	7L	58	1L	10	7L	10L	1L	1L	20	7L	15L	200	460L	15L	460L	5L	3L	170	10L	37	6	130	110
		778B	2	0.5L	10L	450	415	7	5L	0.8				48	15L	5L	2	45	22L	5	22L	15L	5L	7L		230	7L	110	15	15L	68L	82	7L	62	1L	14	7L	10L	1L	1L	25	9	15L	270	460L	15L	460L	5L	3L	180	10L	50	6	110	210
		778C	2	0.5L	10L	450	939	9	5L	0.5 L				55	15L	12	2	39	22L	6	22L	15L	5L	7L		250	7L	150	5	25	68L	56	7L	52	1L	12	15L	10L	1L	1L	15	9	15L	1300	460L	15L	460L	15L	3L	160	10L	51	4	42	400
		778D	2	0.5L	10L	220	514	14	5L	0.5 L				36	15L	5L	2	42	22L	36	22L	3L	5L	7L		290	7L	130	2L	20	68L	40	7L	68	1L	10L	7L	10L	1L	1L	28	8	15L	310	460L	15L	460L	5L	3L	180	10L	64	6	32	370
		778E	*	0.5L	10L	460	646	9	5L	0.5 L				90	15L	5L	2	41	22L	3L	22L	15L	5L	7L		320	7L	160	12	21	68L	71	7L	130	2L	11	7L	10L	1L	1L	19	7	15L	530	460L	15L	460L	5L	3L	160	10L	50	5	68	290
		779A	2	0.5L	10L	300	762	14	5L	0.5 L				54	15L	7	1	50	22L	51	22L	3L	5L	7L		290	7L	230	5	15L	68L	55	7L	74	1L	10L	7L	10L	1L	1L	20	7L	15L	660	460L	15L	460L	5L	3L	160	10L	42	6	62	170
		779B	2	0.5L	10L	420	816	10	5L	0.5 L				51	15L	10	2	44	22L	23	22L	15L	5L	7L		260	7L	180	12	18	68L	66	7L	90	1L	13	7L	10L	1L	1L	26	9	15L	1100	460L	15L	460L	5L	3L	190	10L	63	6	70	310
		779C	2	0.5L	10L	410	480	18	5L	0.5 L				58	15L	5L	2	36	22L	41	22L	3L	5L	7L		150	7L	410	28	20	68L	78	7L	120	1L	13	7L	10L	1L	1L	20	10	15L	330	460L	15L	460L	5L	3L	180	10L	76	4	110	340
		779D	†	0.5L	10L	370	665	15	5L	0.5 L				70	15L	10	1	43	22L	63	22L	3L	5L	7L		190	7L	220	23	19	68L	67	7L	130	1L	11	7L	10L	1L	1L	22	9	15L	600	460L	15L	460L	5L	3L	200	10L	74	5	86	350
		793A	2	0.5L	10L	360	1020	19	6	0.5 L				62	15L	18	3	52	22L	29	22L	3L	5L	7L		320	7L	150	2L	20	68L	73	7L	120	1L	17	7L	10L	1L	1L	28	10	15L	2200	460L	15L	460L	5L	3L	200	10L	62	7	24	290
		793B	2	0.5L	10L	420	484	8	5L	0.5 L				52	15L	13	2	37	22L	3L	22L	15L	5L	7L		300	7L	100	6	20	68L	66	7L	110	1L	12	7L	10L	1L	1L	23	8	15L	410	460L	15L	460L	5L	3L	160	10L	52	4	48	340
		793C	2	0.5L	10L	410	447	15	5L	0.5 L				46	15L	5L	4	40	22L	7	22L	15L	5L	7L		200	7L	150	11	22	68L	81	7L	84	1L	13	7L	10L	1L	1L	19	8	15L	220	460L	15L	460L	5L	3L	170	10L	68	5	86	410
Smith	Pittsburgh (No. 8)	730	1	0.5L	10L	460G	267	9	5L	4.9	63L	25	104	175	7L	5L	1L	34	15L	12	22L	3L	5L	7L	5L	90	3L	190	7	16	68L	89	7L	120	1L	10	7L	10L	1L	1L	24	8	15L	650	460L	10L	460L	5L	3L	150	10L	42	4	100	330
		730A	1	0.8	10L	480	199	6	5L	5.3	43L	20	87	1400	7L	5L	1L	30	15L	12	22L	3L	5L	7L	5L	87	3L	320	21	16	68L	91	7L	170	1L	12	7L	10L	1L	1L	18	5L	150	450	460L	10L	460L	5L	3L	110	10L	28	3	160	420
Union	Meigs Creek (No. 9)	798	1	0.8	10L	460G	396	9	5L	0.56				66	15L	5L	3	42	22L	7	100L	3L	5L	7L		150	7L	160	8	15	68L	96	7L	44	1L	14	7L	10L	1L	1L	26	8	15L	320	460L	15L	460L	5L	3L	180	10L	64	6	90	290
Washington	Pittsburgh (No. 8)	722	1	N	N	500	300	7	N	1 L	N	15	70	45	B	B	N	50	B	30	N	B	N	B	100L	90	B	200	7	20	N	50	B	30	N	N	N	N	B	B	15	N	N	500	N	B	N	N	B	150	N	30	B	91	150
		723	1	N	N	300	300	7	N	1 L	500L	15	70	56	B	B	N	30	B	N	N	B	N	B	100L	90	B	150	7	20	N	50	B	35	N	N	N	N	B	B	20	N	N	300	N	B	N	N	B	150	N	50	B	110	150
		728	1	N	N	700	200	7	N	1 L	500L	15	70	46	B	B	N	30	B	N	N	B	N	B	100L	76	B	200	N	20	N	50	B	35	N	N	N	N	B	B	15	N	N	300	N	B	N	N	B	150	N	30	B	80	N
		729	1	N	N	500	200	7	N	1 L	500L	15	70	46	B	B	N	30	B	N	N	B	N	B	100L	76	B	150	N	20	N	50	B	35	N	N	N	N	B	B	15	N	N	300	N	B	N	N	B	150	N	30	B	80	N
Wheeling		814	1	0.5	10L	460G	286	9	5L	0.70				60	15L	8	2	43	22L	24	22L	3L	5L	7L		100	7L	180	7	15L	68L	64	7L	20	1L	10L	7L	10L	1L	1L	16	7L	15L	210	460L	15L	460L	5L	3L	110	10L	37	6	90	70
		815	1	0.5	10L	460G	185	9	5L	1.0				66	15L	5L	1L	33	22L	15	22L	3L	5L	7L		96	7L	150	15	15L	68L	49	7L	32	1L	10L	7L	10L	1L	1L	12	7L	15L	240	460L	15L	460L	5L	3L	83	10L	21	3	120	59
York		724	1	N	N	500	300	7	N	1 L	500L	20	70	52	B	B	N	30	B	N	N	B	N	B	100L	100	B	150	N	20	N	50	B	45	N	N	N	N	B	B	15	N	N	500	N	B	N	N	B	150	N	30	B	80	N
		725	1	N	N	700	200	7	N	1 L	500L	20	70	56	B	B	N	30	B	N	N	B	N	B	100L	92	B	150	15	20	N	50	B	40	N	N	N	N	B	B	15	N	N	500	N	B	N	N	B	100	N	30	B	90	150
COSHOCTON COUNTY																																																						
Franklin	Middle Kittanning (No. 6)	742A	2	0.6	10L	460G	2150G	26	5L	2.1				48	15L	14	2	39	52	28	22L	3L	5L	7L		220	7L	560	38	21	68L	47	7L	160	1L	19	7L	10L	1L	1L	22	7L	15L	340	460L	68L	460L	5L	3L	130	10L	78	4	430	340
		742B	2	0.7	10L	460G	581	18	5L	0.5 L				68	15L	5L	2	42	22L	23	22L	3L	5L	7L		290	7L	140	24	18	68L	41	7L	120	1L	12	7L	10L	1L	1L	19	7L	15L	180	460L	15L	460L	5L	3L	140	10L	45	4	68	280
		775A	2	0.8	10L	460G	1310	20	5L	0.9				96	15L	16	2	56	22L	110	100L	3L	5L	7L		190	7L	120	69	18	68L	45	7L	160	1L	13	7L	10L	1L	1L	27	7L	15L	170	460L	68L	460L	5L	3L	230	10L	80	7	290	440
		775B	2	0.7	10L	460G	1670	23	5L	0.5 L				48	15L	10	1L	41	22L	35	100L	3L	5L	7L		150	7L	530	25	18	68L	26	7L	150	1L	17	7L	10L	1L	1L	15	7L	15L	290	460L	68L	460L	5L	3L	63	10L	45	5	96	83
Linton		781A	2	0.5	10L	460G	192	14	5L	0.5 L				50	15L	5L	2	40	24	7	22L	3L	5L	7L		390	7L	610	43	18	68L	49	7L	100	1L	18	7L	10L	1L	1L	21	9	15L	360	460L	68L	460L	5L	3L	110	10L	84	5	80	450
		781B	2	1.0	10L	460G	203	19	5L	0.5 L				140	15L	20	4	57	35	17	22L	3L	5L	7L		210	7L	190	38	23	68L	72	7L	140	1L	17	15L	10L	1L	1L	25	9	15L	510	460L	15L	460L	5L	3L	160	10L	170	6	150	430
		781C	2	0.7	10L	460G	250	11	5L	0.5 L				94	15L	22	5	38	26	6	22L	3L	5L	7L		230	7L	110	25	25	130	79	7L	130	1L	20	7L	10L	1L	1L	21	13	15L	510	460L	15L	460L	5L	3L	140	10L	130	7	190	400
		782A	2	0.7	10L	460G	200	48	5L	0.5 L				54	15L	5L	1L	43	30	13	22L	3L	5L	7L		290	7L	520	40	21	68L	57	7L	130	2L	16	7L	10L	1L	1L	20	7L	15L	470	460L	68L	460L	5L	3L	90	10L	100	5	62	490
		782B	2	0.9	10L	460G	157	17	5L	0.5 L				100	15L	18	3	62	22L	10	22L	3L	5L	7L		210	7L	200	23	19	68L	48	7L	150	2L	16	7L	10L	1L	1L	28	7L	15L	340	460L	68L	460L	5L	3L	170	10L	120	7	100	500
		782C	2	0.7	10L	410	343	11	5L	0.5 L				120	15L	12	3	75	22L	55	22L	15L	5L	7L		520	7L	140	22	32	68L	78	7L	100	1L	12	7L	10L	1L	1L	21	9	15L	500	460L	15L	460L	5L	3L	210	10L	85	7	270	400
Virginia	Lower Kittanning (No. 5)	745A	2	0.1L	11L	1100G	360	24	25L	0.68				42	36L	11L	2L	19	11	34	110L	8L	8L	17L		26	25L	570W	56	11	58	32	11L	10L	2L	78L	8L	11L	1L	4L	19	52L	8L	290	360L	36L	B	11L	5L	83	11L	56	5	210	110
		745B	2	0.4	11L	1100G	220	19	25L	0.70				84	36L	11L	2L	29	8L	5L	110L	8L	8L	360L		66	25L	180W	32	18	66	27	11L	42	2L	99	8L	11L	1L	4L	22	52L	8L	170	360L	36L	B	11L	5L	97	11L	65	3	160	190
		745C	2	0.5	11L	1100G	110	26	25L	0.88				79	36L	11L	2	32	17	7	110L	8L	8L	360L		89	25L	120W	17	24	52L	44	11L	31	2L	78L	8L	11L	1L	4L	25	52L	8	210	360L	36L	B	11L	5L	110	11L	130	6	190	260
		745D	2	0.5	11L	1100G	220	29	25L	2.7				150	47	30	4	50	40	260	110L	8L	8L	360L		39	25L	170W	40	27	79	160	11L	42	2L	78L	8L	11L	1L	4L	29	52L	14	340	360L	36L	B	11L	5L	140	11L	180	17	1300	500
	Middle Kittanning (No. 6)	739	1	0.5	11L	1100G	360	22	25L	0.72				91	36L	11L	2L	40	8L	42	110L	8L	8L	360L		110	25L	140W	42	13	52L	42	11L	51	2L	78L	8L	11L	1L	4L	22	52L	11	230	360L	36L	B	11L	5L	83	11L	49	4	170	83
		740A	2	0.2	11L	1100G	390	19	25L	0.92				73	36L	11L	2L	22	8L	5L	110L	8L	8L	17L		140	25L	270W	15	4	52L	33	11L	22	2L	78L	8L	11L	1L	4L	15	52L	8L	350	360L	36L	B	11L	5L	59	11L	23	3	190	46
		740B	2	0.5	11L	1100G	170	30	25L	0.76				110	36L	11L	3	50	23	35	110L	8L	8L	17L		120	25L	170W	25	10	H	34	11L	10	2L	78L	8L	11L	1L	4L	29	52L	15	560	360L	36L	B	11L	5L	110	11L	110	5	170	110
		740C	2	0.3	11L	420	140	10	25L	0.82				100	36L	11L	2L	26	9	18	110L	8L	8L	360L		190	25L	85W	13	7	52L	34	11L	17	2L	78L	8L	11L	1L	4L	19	52L	8L	110	360L	36L	B	11L	5L	83	11L	39	4	200	89
GUERNSEY COUNTY																																																					
Oxford	Pittsburgh (No. 8)	803	1	0.5	10L	460G	281	18	5L	0.5 L				59	15L	7	3	32	22L	56	22L	3L	5L	7L		67	7L	160	14	17	68L	54	7L	26	1L	15	7L	10L	1L	1L	24	7L	15L	260	460L	15L	460L	5L	3L	140	10L	57	4	120	400
HARRISON COUNTY																																																					
Athens	Meigs Creek (No. 9)	737A	2	0.6	10L	460G	419	11	5L	0.74				62	15L	5L	3	54	22L	5	22L	3L	5L	7L		150	7L	110	10	16	68L	100	7L	22	1L	16	7L	10L	1L	1L	25	9	15L	480	460L	15L	460L	5L	3L	170	10L	56	6	110	290
		737B	2	0.5L	10L	460G	272	14	5L	0.32				46	15L	5L	3	60	22L	10	22L	15L	5L	7L		580	7L	98	2L	17	68L	73	7L	32	1L	10L	7L	10L	1L	1L	27	7L	15L	230	460L	15L	460L	5L	3L	180	10L	36	7	66	180
		784A	2	0.7	10L	460G	296	11	5L	0.44				68	15L	5L	3	45	22L	36	22L	3L	5L	7L		150	7L	170	7	15L	68L	100	7L	32	1L	10L	7L	10L	1L	1L	13	7L	15L	320	460L	68L	460L	5L	3L	110	10L	24	6	160	66
		784B	2	0.5L	10L	460G	248	7	5L	0.24				46	15L	5L	2	33	22L	3	22L	3L	5L	7L		96	7L	71	2	15L	68L	58	7L	32	1L	10L	7L	10L	1L	1L	16	7L	15L	210	460L	15L	460L	5L	3L	140	10L	24	6	70	110
		784C	2	0.5L	10L	460G	225	14	5L	0.24				36	15L	5L	1	36	22L	6	22L	3L	5L	7L		110	7L	78	2L	15L	68L	44	7L	22	1L	10L	7L	10L	1L	1L	17	7L	15L	170	460L	15L	460L	5L	3L	120	10L	33	4	52	120
		792A	2	0.9	10L	460G	261	11	5L	0.5 L				60	15L	8	1	46	22L	5L	22L	3L	5L	7L		130	7L	96	10	24	68L	66	7L	128	1L	13	7L	10L	1L	1L	23	7	29	430	460L	15L	460L	5L	3L	180	10L	73	4	100	350
		792B	2	0.5L	10L	460G	237	10	5L	0.5 L				42	28	5L	2	36	22L	5	22L	3L	5L	7L		100	7L	72	2L	17	68L	70	7L	26	1L	10L	7L	10L	1L	1L	21	7L	15L	290	460L	15L	460L	5L	3L	160	10L	43	4	86	200
		792C	2	0.5L	10L	460G	238	13	5L	0.6				50	15L	5L	2	30	22L	5L	22L	3L	5L	7L		62	7L	89	14	15	68L	52	7L	90	1L	10	7L	10L	1L	1L	15	7L	15L	180	460L	15L	460L	5L	3L	130	10L	42	3	74	190
Cadiz	Lower Freeport (No. 6A)	736	1	0.6	10L	450	357	22	5L	2.2				88	15L	5L	3	40	15L	56	22L	3L	5L	7L		68	7L	380	16	15L	68L	210	7L	170	1L	10L	7L	10L	1L	1L	15	7L	15L	170	460L	68L	460L	5L	3L	71	10L	58	6	450	81
		813	1	0.6	10L	460G	261	28	7	1.4				86	15L	5L	1L	47	22L	50	22L	3L	5L	7L		82	7L	200	16	15L	68L	180	7L	130	1L	10L	7L	10L	1L	1L	13	7L	15L	160	460L	15L	460L	5L	3L	98	10L	48	5	250	76
	Pittsburgh (No. 8)	796	1	0.8	10L	460G	218	13	5L	1.0				60

TABLE 10.–*Trace element composition of the laboratory ash, by bed*
(significant figures consistent only with data supplied by the U.S. Geological Survey; J. H. Medlin, oral communication, 1977)

Key to symbols:
Type:
1 - bed sample
2 - benched sample
3 - stockpile sample
* - composite of 778A-C
† - composite of 779 B and C

Method (column heads):
E - by emission spectrography
W - by wet chemistry

B - no data available
G - greater than value shown
H - not determined due to interference
L - less than value shown
N - not detected
W - by wet chemistry

All values in parts per million

County	Township	OGS file no.	Type	Ag E	Au E	B E	Ba E	Be E	Bi E	Cd W	Ce E	Co E	Cr E	Cu W	Dy E	Er E	Eu E	Ga E	Gd E	Ge E	Hf E	Ho E	In E	Ir E	La E	Li W	Lu E	Mn E	Mo E	Nb E	Nd E	Ni E	Os E	Pb W	Pd E	Pr E	Pt E	Re E	Rh E	Ru E	Sc E	Sm E	Sn E	Sr E	Ta E	Tb E	Te E	Tl E	Tm E	V E	W E	Y E	Yb E	Zn W	Zr E
BROOKVILLE (NO. 4) COAL																																																						
Noble	Elk	773	1	1	N	300	1500	20	N	2.0			120	N	N	N	100	N	150	N	N	N	B		45	N	140W	15	30	B	300	B	160	N	B	N	N	B	B	30	B	N	300	N	N	N	N	N	150	N	150	15	880	200
CLARION (NO. 4A) COAL																																																						
Meigs	Columbia	804A	2	0.5L	10L	460G	338	10	5L	1.9			69	15L	15	3	29	22L	3L	22L	3L	5L	7L		45	7L	130	23	15L	68L	57	7L	21	1L	13	7L	10L	1L	1L	21	7	15L	370	460L	15L	460L	5L	3L	130	10L	66	5	290	260
		804B	2	0.5L	10L	170	349	3	5L	0.1 L			24	15L	5L	2	31	22L	3L	22L	15L	5L	7L		38	7L	99	2L	15L	68L	32	7L	24	1L	10L	7L	10L	1L	1L	18	7L	15L	140	460L	15L	460L	5L	3L	100	10L	24	3	56	170
		804C	2	0.5L	10L	460G	274	13	5L	0.34			24	15L	9	4	30	15L	4	22L	3L	5L	7L		88	7L	130	10	15L	68L	50	7L	34	1L	16	7L	10L	1L	1L	16	9	15L	400	460L	15L	460L	5L	3L	140	10L	80	5	71	270
		804D	2	0.5L	10L	460G	270	10	5L	0.40			98	15L	6	4	33	22L	3L	22L	15L	5L	7L		150	7L	99	7	15L	68L	69	7L	30	1L	18	7L	10L	1L	1L	34	11	15L	430	460L	15L	460L	5L	3L	160	10L	68	7	71	300
		805	1	0.5L	10L	460G	361	6	5L	0.60			57	15L	5L	3	32	15L	3L	22L	15L	5L	7L		67	7L	180	9	15L	68L	47	7L	25	1L	10L	7L	10L	1L	1L	17	7L	15L	290	460L	15L	460L	5L	3L	110	10L	35	6	130	88
	Salem	806A	2	0.5L	10L	460G	1260	16	5L	0.72			48	15L	5L	1	23	22L	3L	22L	3L	5L	7L		60	7L	160	9	15L	68L	22	7L	10L	1L	14	7L	10L	1L	1L	14	7L	15L	260	460L	15L	460L	5L	3L	67	10L	31	3	99	210
		806B	2	0.5L	10L	170	809	3	5L	0.1 L			35	15L	5L	2	33	22L	3L	22L	15L	5L	7L		94	7L	96	2L	15L	68L	36	7L	30	1L	10L	7L	10L	1L	1L	23	7L	15L	130	460L	15L	460L	5L	3L	120	10L	28	5	53	180
		806C	2	0.9	10L	460G	261	7	5L	0.34			68	15L	17	4	46	22L	3L	22L	3L	5L	7L		130	7L	150	5	15L	68L	27	7L	11	1L	14	7L	10L	1L	1L	13	7L	15L	250	460L	68L	460L	5L	3L	71	10L	37	6	66	49
		806D	2	0.5	10L	460	348	5	5L	0.36			80	15L	14	3	53	15L	19	22L	3L	5L	7L		100	7L	140	7	15L	68L	22	7L	12	1L	12	7L	10L	1L	1L	17	7L	15L	170	460L	68L	460L	5L	3L	130	10L	50	6	79	89
Vinton	Wilkesville	807A	2	0.1L	10L	1000G	390	17	22L	3.3			69	32L	10L	3	52	19	12	100L	7L	7L	15L		81	22L	390	40	36	90	53	10L	18	2L	68L	7L	10L	1L	3L	31	46L	7L	740	320L	32L	B	10L	5L	180	10L	77	6	180	560
		807B	2	0.2L	18L	200	580	3	40L	0.14			44	58L	18L	3L	31	12L	8L	180L	12L	12L	27L		57	40L	86W	4L	15	91	47	18L	23	3L	120L	12L	18L	2L	6L	29	83L	12L	180	580L	58L	B	18L	8L	150	18L	29	5	52	220
		807C	2	0.4	10L	1000G	230	11	22L	0.46			75	32L	12	2	61	25	7	100L	7L	7L	320L		99	22L	310	12	25	84	55	10L	23	2L	68L	7L	10L	1L	3L	34	46L	7L	550	320L	32L	B	10L	5L	200	10L	88	6	80	380
		807D	2	0.4	10L	1000G	380	8	22L	0.52			82	32L	10L	2	51	16	6	100L	7L	7L	15L		100	22L	270	5	34	80	51	10L	21	2L	68L	7L	10L	1L	3L	32	46L	7L	820	320L	32L	B	10L	5L	180	10L	67	5	77	500
		808	1	0.1L	10L	650	330	6	22L	0.60			66	32L	10L	3	53	16	5L	100L	7L	7L	15L		80	22L	320	8	20	92	65	10L	26	2L	68L	7L	10L	1L	3L	32	46L	7L	380	320L	32L	B	10L	5L	190	10L	55	5	68	270
LOWER KITTANNING (NO. 5) COAL																																																						
Coshocton	Virginia	745A	2	0.1L	11L	1100G	360	24	25L	0.68			42	36L	11L	2L	19	11	34	110L	8L	8L	17L		26	25L	570W	56	11	58	32	11L	10L	2L	78L	8L	11L	1L	4L	19	52L	8L	290	360L	36L	B	11L	5L	83	11L	56	5	210	110
		745B	2	0.4	11L	1100G	220	19	25L	0.70			84	36L	11L	2L	29	8L	5L	110L	8L	8L	360L		66	25L	180W	32	18	66	27	11L	42	2L	99	8L	11L	1L	4L	22	52L	8L	170	360L	36L	B	11L	5L	97	11L	65	3	160	190
		745C	2	0.5	11L	1100G	110	26	25L	0.88			79	36L	11L	2	32	17	7	110L	8L	8L	360L		89	25L	120W	17	24	52L	44	11L	31	2L	78L	8L	11L	1L	4L	25	52L	8	210	360L	36L	B	11L	5L	110	11L	130	6	190	260
		745D	2	0.5	11L	1100G	220	29	25L	2.7			150	47	30	4	50	40	260	110L	8L	8L	360L		39	25L	170W	40	27	79	160	11L	42	2L	78L	8L	11L	1L	4L	29	52L	14	340	360L	36L	B	11L	5L	140	11L	180	17	1300	500
Noble	Elk	772	1	N	N	300	300	20	N	0.89			120	N	N	N	70	N	70	N	N	N	B		79	N	130W	70	30	N	150	B	56	N	N	N	N	B	B	30	N	N	300	N	N	N	N	N	300	N	100	10	160	150
MIDDLE KITTANNING (NO. 6) COAL																																																					
Coshocton	Franklin	742A	2	0.6	10L	460G	2150G	26	5L	2.1			48	15L	14	2	39	52	28	22L	3L	5L	7L		220	7L	560	38	21	68L	47	7L	160	1L	19	7L	10L	1L	1L	22	7L	15L	340	460L	68L	460L	5L	3L	130	10L	78	4	430	340
		742B	2	0.7	10L	460G	581	18	5L	0.5 L			68	15L	5L	2	42	22L	23	22L	3L	5L	7L		290	7L	140	24	18	68L	41	7L	120	1L	12	7L	10L	1L	1L	19	7L	15L	189	460L	15L	460L	5L	3L	140	10L	45	4	68	280
		775A	2	0.8	10L	460G	1310	20	5L	0.9			96	15L	16	2	56	22L	110	100L	3L	5L	7L		190	7L	120	69	18	68L	45	7L	160	1L	13	7L	10L	1L	1L	27	7L	15L	170	460L	68L	460L	5L	3L	230	10L	80	7	290	440
		775B	2	0.7	10L	460G	1670	23	5L	0.5 L			48	15L	10	1L	41	22L	35	100L	3L	5L	7L		150	7L	530	25	18	68L	26	7L	150	1L	17	7L	10L	1L	1L	15	7L	15L	290	460L	68L	460L	5L	3L	63	10L	45	5	96	83
	Linton	781A	2	0.5	10L	460G	192	14	5L	0.5 L			50	15L	5L	2	40	24	7	22L	3L	5L	7L		390	7L	610	43	18	68L	49	7L	100	1L	18	7L	10L	1L	1L	21	9	15L	360	460L	68L	460L	5L	3L	110	10L	84	5	80	450
		781B	2	1.0	10L	460G	203	19	5L	0.5 L			140	15L	20	4	57	35	17	22L	3L	5L	7L		210	7L	190	38	23	68L	72	7L	140	1L	17	15L	10L	1L	1L	25	9	15L	510	460L	15L	460L	5L	3L	160	10L	170	6	150	430
		781C	2	0.7	10L	460G	250	11	5L	0.5 L			94	15L	22	5	38	26	6	22L	3L	5L	7L		230	7L	110	25	25	130	79	7L	130	1L	20	7L	10L	1L	1L	21	13	15L	510	460L	15L	460L	5L	3L	140	10L	130	7	190	400
		782A	2	0.7	10L	460G	200	48	5L	0.5 L			54	15L	5L	1L	43	30	13	22L	3L	5L	7L		290	7L	520	40	21	68L	57	7L	130	2L	16	7L	10L	1L	1L	20	7L	15L	470	460L	68L	460L	5L	3L	90	10L	100	5	62	490
		782B	2	0.9	10L	460G	157	17	5L	0.5 L			100	15L	18	3	62	22L	10	22L	3L	5L	7L		210	7L	200	23	19	68L	48	7L	150	2L	16	7L	10L	1L	1L	28	7L	15L	340	460L	68L	460L	5L	3L	170	10L	120	7	100	500
		782C	2	0.7	10L	410	343	11	5L	0.5 L			120	15L	12	3	75	22L	55	22L	15L	5L	7L		520	7L	140	22	32	68L	78	7L	100	1L	12	7L	10L	1L	1L	21	9	15L	500	460L	15L	460L	5L	3L	210	10L	85	7	270	400
	Virginia	739	1	0.5	11L	1100G	360	22	25L	0.72			91	36L	11L	2L	40	8L	42	110L	8L	8L	360L		110	25L	140W	42	13	52L	42	11L	51	2L	78L	8L	11L	1L	4L	22	52L	11	230	360L	36L	B	11L	5L	83	11L	49	4	170	83
		740A	2	0.2	11L	1100G	390	19	25L	0.92			73	36L	11L	2L	22	8L	5L	110L	8L	8L	17L		140	25L	270W	15	4	52L	33	11L	22	2L	78L	8L	11L	1L	4L	15	52L	8L	350	360L	36L	B	11L	5L	59	11L	23	3	190	46
		740B	2	0.5	11L	1100G	170	30	25L	0.76			110	36L	11L	3	50	23	35	110L	8L	8L	17L		120	25L	170W	25	10	H	34	11L	10	2L	78L	8L	11L	1L	4L	29	52L	15	560	360L	36L	B	11L	5L	110	11L	110	5	170	110
		740C	2	0.3	11L	420	140	10	25L	0.82			100	36L	11L	2L	26	9	18	110L	8L	8L	360L		190	25L	85W	13	7	52L	34	11L	17	2L	78L	8L	11L	1L	4L	19	52L	8L	110	360L	36L	B	11L	5L	83	11L	39	4	200	89
Muskingum	Adams	743A	2	0.3	11L	580	460	17	25L	4.4			75	36L	11L	2	39	8L	7	110L	8L	8L	17L		99	25L	100W	27	5	58	43	11L	10L	2L	78L	8L	11L	1L	4L	16	52L	9	1300	360L	36L	B	11L	5L	48	11L	36	5	660	49
		743B	2	0.4	11L	540	48	5	25L	0.40			23	36L	11L	2L	23	8L	6	110L	8L	8L	360L		17	25L	100W	34	4L	52L	7	11L	10L	2L	78L	8L	11L	1L	4L	7	52L	8L	130	360L	36L	B	11L	5L	15	11L	10	3	81	11
		743C	2	0.2L	18L	150	490	4	40L	0.1 L			37	58L	18L	3L	29	12L	8L	180L	12L	12L	27L		430	40L	140W	4L	17	83L	31	18L	18	3L	120L	12L	18L	2L	6L	24	83L	12L	160	580L	58L	B	18L	8L	130	18L	16	4	40	220
		743D	2	0.1L	11L	380	350	14	25L	0.66			58	36L	11L	2L	41	8L	62	110L	8L	8L	17L		230	25L	650W	56	6	52L	58	11L	28	2L	78L	8L	11L	1L	4L	25	52L	8L	180	360L	36L	B	11L	5L	140	11L	22	5	54	130
	Monroe	744	1	0.3	11L	1100G	330	19	25L	0.62			81	36L	11L	2L	39	8L	21	110L	8L	8L	17L		250	25L	120W	23	18	68	30	11L	17	2L	78L	8L	11L	1L	4L	30	52L	9	170	360L	36L	B	11L	5L	160	11L	64	4	180	250
	Washington	801A	2	0.6	10L	1000G	2500	99	22L	0.94			110	50	26	4	96	43	120	100L	7L	7L	15L		150	22L	760	110	25	200	100	10L	24	2L	68L	7L	10L	1L	3L	46	46L	14	1600	320L	32L	B	10L	5L	200	10L	240	10	290	300
		801B	2	0.5	10L	430	240	23	22L	1.1			140	32L	10L	2	64	13	140	100L	7L	7L	15L		200	22L	330	11	5	47	63	10L	35	2L	68L	7L	10L	1L	3L	22	46L	7L	620	320L	32L	B	10L	5L	120	10L	39	7	200	58
		802A	2	0.8	10L	1000G	190	58	22L	074			56	32L	10L	2L	45	7L	24	100L	7L	7L	320L		56	22L	490	120	19	48	42	10L	10L	2L	68L	7L	10L	1L	3L	15	46L	7L	390	320L	32L	B	10L	5L	55	10L	120	5	270	140
		802B	2	0.5	10L	1000G	970	66	22L	0.98			170	32L	23	3	110	23	62	100L	7L	7L	320L		200	22L	390	33	33	130	67	10L	21	2L	68L	7L	10L	1L	3L	41	46L	13	430	320L	32L	B	10L	5L	230	10L	220	14	250	300
		802C	2	0.6	10L	380	470	25	22L	0.84			110	32L	14	2	48	7L	160	100L	7L	7L	15L		220	22L	210	11	27	94	93	10L	53	2L	68L	7L	10L	1L	3L	35	46L	7L	360	320L	32L	B	10L	5L	180	10L	89	8	160	380
Noble	Elk	771	1	N	N	150	700	15	N	2.4			140	N	N	N	70	N	50	N	N	N	B		110	N	90W	50	30	N	100	B	97	N	N	N	N	B	B	30	N	N	150	N	N	N	N	N	300	N	70	7	1100	150
		774	1	0.5	10L	380	2300	17	22L	0.76			150	32L	10L	2L	49	18	67	100L	7L	7L	15L		67	22L	110W	70	19	54	110	10L	87	2L	68L	7L	10L	1L	3L	24	46L	12	1400	320L	32L	B	10L	5L	150	10L	71	4	97	210
Perry	Bearfield	783A	2	1.5	10L	220	269	11	5L	0.5 L			42	15L	5L	1L	41	22L	4	22L	68L	5L	7L		310	7L	86	5	15	68L	26	7L	110	1L	10L	7L	10L	1L	1L	18	7L	15L	130	460L	15L	460L	5L	3L	120	10L	36	3	20	240
		783B	2	0.5L	10L	460G	341	12	5L	0.5 L			52	15L	9	1	47	22L	3L	22L	15L	5L	7L		390	7L	120	2L	15L	68L	37	7L	68	1L	10L	7L	10L	1L	1L	21	7L	15L	250	460L	15L	460L	5L	3L	160	10L	34	4	32	140
		783C	2	4.4	10L	460G	276	27	5L	0.5			92	15L	9	2	49	22L	3L	22L	3L	5L	7L		160	7L	150	11	18	68L	100	7L	150	1L	17	7L	10L	1L	1L	26	8	15L	240	460L	15L	460L	5L	3L	170	10L	100	7	110	300
	Pike	741	1	0.2	11L	790	260	11	25L	0.56			70	36L	11L	2L	38	8L	8	110L	8L	8L	17L		270	25L	40W	11	13	79	40	11L	19	2L	78L	8L	11L	1L	4L	25	66	8L	420	360L	36L	B	11L	5L	140	11L	40	3	74	170
		776A	2	0.5L	10L	390	411	12	5L	0.5			56	15L	5L	2	50	22L	5	22L	3L	5L	7L		240	7L	99	2L	15L	68L	36	7L	96	1L	12	15L	10L	1L	1L	24	7L	15L	300	460L	15L	460L	5L	3L	190	10L	37	7	94	190
		776B	2	0.6	10L	460G	348	13	5L	0.5 L			70	15L	8	3	60	22L	5	22L	3L	5L	7L		410	7L	87	10	15L	68L	74	7L	58	1L	17	7L	10L	1L	1L	25	10	15L	860	460L	15L	460L	5L	3L	190	10L	44	6	40	100
		776C	2	0.7	10L	460G	293	8	5L	0.5 L			73	15L	5L	2	40	22L	3L	22L	15L	5L	7L		290	7L	96	5	18	68L	69	7L	74	2L	10L	7L	10L	1L	1L	18	7L	15L	190	460L	15L	460L	5L	3L	140	10L	34	6	58	250
		776D	2	0.9	10L	460G	165	29	5L	2.2			130	15L	5L	1L	45	22L	68	22L	3L	5L	7L		54	7L	120	34	18	68L	94	7L	220	1L	15	7L	10L	1L	1L	26	7L	15L	190	460L	68L	460L	5L	3L	190	10L	79	13	700	95
	Pleasant	777A	2	0.6	10L	440	354	22	5L	0.5 L			53	15L	5L	2	48	22L	47	22L	3L	5L	7L		140	7L	130	6	20	68L	51	7L	170	1L	15	7L	10L	1L	1L	22	7	15L	400	460L	68L	460L	5L	3L	150	10L	62	6	40	340
		777B	2	0.5	10L	440	428	8	5L	0.5 L			70	15L	6	2	45	22L	4	22L	15L	5L	7L		260	7L	140	2L	16	68L	73	7L	62	1L	12	7L	10L	1L	1L	26	7L	15L	340	460L	15L	460L	5L	3L	200	10L	43	7	49	260
		777C	2	0.7	10L	460G	298	12	5L	0.5 L			69	15L	5L	2	41	22L	3L	22L	3L	5L	7L		210	7L	140	9	43	68L	120	7L	96	2L	15	7L	10L	1L	1L	19	9	15L	220	460L	15L	460L	5L	3L	190	10L	73	5	84	650
		777D	2	0.7	10L	460G	214	38	5L	0.6			130	15L	13	2	49	28	110	22L	3L	5L	7L		84	7L	510	15	15L	68L	120	7L	260	1L	13	7L	10L	1L	1L	22	7	15L	260	460L	68L	460L	5L	3L	97	10L	110	7	220	230
		777E	1	0.6	10L	460G	326	16	6	0.5 L			62	15L	12	2	47	22L	26	22L	68L	5L	7L		180	7L	170	5	20	68L	73	7L	110	2L	14	7L	10L	1L	1L	24	7	15L	290	460L	15L	460L	5L	3L	150	10L	61	5	49	320
Washington	Liberty	770	1	0.5	10L	420	120	28	22L	1.3			240	32L	10L	2L	39	7L	40	100L	7L	7L	320L		56	22L	920W	H	19	220L	280	10L	45	2L	68L	7L	10L	1L	3L	20	46L	9	280	320L	32L	B	10L	5L	120	10L	81	H	150	130
LOWER FREEPORT (NO. 6A) COAL																																																					
Harrison	Cadiz	736	1	0.6	10L	450	357	22	5L	2.2			88	15L	5L	3	40	15L	56	22L	3L	5L	7L		68	7L	380	16	15L	68L	210	7L	170	1L	10L	7L	10L	1L	1L	15	7L	15L	170	460L	68L	460L	5L	3L	71	10L	58	6	450	81
		813	1	0.6	10L	460G	261	28	7	1.4			86	15L	5L	1L	47	22L	50	22L	3L	5L	7L		82	7L	200	16	15L	68L	180	7L	130	1L	10L	7L	10L	1L	1L	13	7L	15L	160	460L	15L	460L	5L	3L	98	10L	48	5	250	76
	Greene	718	1	N	N	300	500	10	N	1 L	500L	30	100	92	N	N	N	B	N	N	N	N	B	100	160	N	100	20	30	150L	70	B	60	N	N	N	N	B	B	20	N	N	1000	N	N	N	N	N	200	N	70	B	110	150
		719	1	N	N	500	150	7	N	1 L	500L	30	100	110	B	B	N	30	B	N	N	B	N	B	100L	160	B	150	15	30	N	70	B	65	N	N	N	N	B	B	20	N	N	500	N	B	N	N	B	150	N	50	B	110	150
		720	1	N	N	300	150	10	N	1 L	500L	50	150	80	B	B	N	50	B	70	N	B	N	B	100L	140	B	150	10	30	N	100	B	120	N	N	N	N	B	B	20	N	N	300	N	B	N	N	B	150	N	50	B	330	150
		721	1	N	N	300	150	7	N	1 L	500L	30	70	70	B	B	N	50	B	N	N	B	N	B	100L	110	B	700	10	20L	N	70	B	85	N	N	N	N	B	B	15	N	N	300	N	B	N	N	B	100	N	50	B	80	150
		809	1	0.6	10L	460G	147	13	5L	0.44			150	15L	5L	2	40	22L	4	100L	3L	5L	7L		190	7L	170	26	15L	68L	160	7L	60	1L	14	7L	10L	1L	1L	17	7	15L	300	460L	15L	460L	5L	3L	150	10L	41	5	100	110
		810	1	1.0	10L	460G	279	18	5L	0.60			150	15L	9	2	68	22L	7	100L	3L	5L	7L		230	7L	150	26	15L	68L	150	7L	54	1L	12	7L	10L	1L	1L	17	9	15L	230	460L	15L	460L	5L	3L	130	10L	64	7	110	210
		811A	2	1.1	10L	460G	320	7	5L	0.44			340	15L	5L	4	83	44	5	100L	3L	5L	7L		230	7L	430	33	15L	68L	100	7L	54	1L	17	7L	10L	1L	1L	21	10	15L	2100	460L	68L	460L	5L	3L	280	10L	46	9	110	70
		811B	2	0.5L	10L	410	370	8	5L	0.2 L			84	15L	5L	1	39	22L	3	22L	15L	5L	7L		200	7L	120	3	15L	68L	79	7L	44	1L	10L	7L	10L	1L	1L	9	7L	15L	200	460L	15L	460L	5L	3L	150	10L	27	5	90	61
		812A	2	0.8	10L	460G	267	7	5L	0.36			290	15L	5L	1L	51	15L	3L	22L	3L	5L	7L		270	7L	160	21	15L	68L	75	7L	54	1L	16	7L	10L	1L	1L	20	9	15L	1900	460L	15L	460L	5L	3L	210	10L	50	4	86	180
		812B	2	0.5L	10L	450	419	10	5L	0.20			88	15L	6	2	46	22L	4	22L	3L	5L	7L		200	7L	160	7	15L	68L	98	7L	60	1L	10L	7L	10L	1L	1L	13	7L	15L	420	460L	15L	460L	5L	3L	140	10L	23	5	94	79
Jefferson	Salem	735	1	1.0